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ACOUSTICAL SOCIETY OF AMERICA

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S12/278

## **MINUTES**

ACCREDITED STANDARDS COMMITTEE ON NOISE, S12

U.S. TAG FOR <u>ISO/TC43/SC1</u> NOISE and <u>ISO/TC94/SC12</u> HEARING PROTECTION



Ottawa, Canada

20 May 1993

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S12/278

## **MINUTES**

## **ACCREDITED STANDARDS COMMITTEE ON NOISE, S12**

U.S. TAG FOR ISO/TC 43/SC1 NOISE

-and-

### ISO/TC 94/SC12 HEARING PROTECTION

Ottawa, Canada

20 May 1993

The meeting was called to order by Mr. D.L. Johnson, Chair S12, at 9:35 A.M. in Salon L'Orangerie, the Chateau Laurier, Ottawa, Canada.

### ORGANIZATIONAL MEMBERS PRESENT

Berger, E.H. National Hearing Conservation Association;

Chair, S12/WG11

Brenig, A. ASA Standards Manager

Burkard, R.F. American Speech-Language-Hearing Association

(ASHA)

Erdreich, J. National Council of Acoustical Consultants (NCAC)

Johnson, D.L. Chair S12; ASA Representative S12

McKinley, R. U.S. Air Force

Monk, W. CAOHC
Patterson, J.H. USAARL
Roth, S.I. ALCOA

Schomer, P.D. U.S. Army Construction Engineering Research

Laboratory (U.S.CERL); Vice Chair S12

### INDIVIDUAL EXPERTS PRESENT

Eldred, K.M.

Chair ASACOS; ASA Standards Director

Guernsey, R.M.

Chair S12/L-8

Royster, L.H.

North Carolina State University

von Gierke, H.E.

U.S. TAG Chair ISO/TC 43 and ISO/TC 43/SC1

Winzer, G.E.

Winzer Associates

Wong, G.S.K.

Chair S1

Young, R.W.

Consultant

### OTHERS PRESENT

Blattenberg, P.T.

**Quest Technologies** 

Bly, S.

Bureau of Radiation and Medical Devices, Canada

Brooks, B.M.

**Brooks Acoustics Corporation** 

Echeverria, J.S.

National Centre of Metrology, Mexico

Embleton, T.F.W.

Vice Chair ASACOS

Gross, E.E.

Associate Editor, STANDARDS NEWS, JASA

Hanson, W.J.

**Liberty Mutual Research Center** 

Luz, G.

U.S. Army Environmental Hygiene Agency

Nedzelnitsky, V.

U.S. Technical Advisor, IEC/TC 29

Nixon, C.

Chair, S12/WG10

Pineda, G.S.

National Centre of Metrology, Mexico

Pope. J.

Pope Engineering

Putnam, R.

Westinghouse, Florida **AES Standards Committee** 

Queen, D.

Chair S12/WG12; Chair S3

Royster, J.D. Sutherland, L.C.

Chair S12/WG9

### 1. Approval of the Minutes of the New Orleans, Louisiana held 3 November 1992 (S12/248)

Upon motion made and seconded, it was

VOTED

to approve the Minutes of the S12 meeting (S12/248) held

on 3 November 1992, as circulated.

### 2. Organization

- a) A <u>list of current working groups</u> is attached (see <u>ATTACHMENT A</u>).
- b) New organizational members of S12 A request for organizational membership in S12 was received from The Council for Accreditation in Occupational Hearing Conservation (CAOHC). The ballot on the proposed membership (LB/S12/244) was closed on 9 November 1992, with results as given in ATTACHMENT R. CAOHC was therefore welcomed as a new organizational member of S12.
- c) New working groups S12/WG34 and S12/WG35 (see page 14 for details)
- d) Personnel changes None to date.
- e) A summary of activities is given in ATTACHMENT B.

### 3. Standards approved by ANSI in 1992/1993 and published (or being published) by ASA

 ANSI S12.9/Part 2-1992 Quantities and Procedures for Description and Measurement of Outdoor Environmental Sound.

 ANSI S12.12-1992 Engineering Method for the Determination of Sound Power Levels of Noise Sources Using Sound Intensity

 ANSI S12.14-1992 Methods for the Field Measurement of the Sound Output of Audible Public Warning Devices Installed at Fixed Locations Outdoors

ANSI S12.15-1992
 Acoustics - Portable Electric Power Tools, Stationary and Fixed Electric Power Tools, and Gardening Appliances. Measurement of Sound Emitted.

ANSI S12.16-1992 Guidelines for the Specification of Noise of New Machinery.

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3. Standards approved by ANSI in 1992/1993 and published (or being published) by ASA (continued)

Standards published by ASA can be ordered from the following address:

Professional Book Distributors (PBD)
ASA Standards Distribution Center
1650 Bluegrass Lakes Parkway
Alpharetta, Georgia 30239

Telephone: (404) 442-8633 Telefax: (404) 442-9742

NOTE: 20% discount on list price is available to ASA individual and sustaining

members for all standards published by ASA.

4. <u>Organizational matters and reports on working groups, including reports on letter ballots and international matters.</u>

a) <u>\$12 Advisory Planning Committee to \$12 - P.D. Schomer, Chair</u>

Mr. Schomer presented a report (see <u>ATTACHMENT C</u>). (The current list of S12 standards is attached -<u>ATTACHMENT D</u>.)

Mr. Young said he thought that, where feasible, there should be one document rather than several, to reduce the cost of paper. Others present agreed, noting that some of the documents were more like technical papers than standards. It was pointed out, however, that the U.S. did not have too much control over the dissemination of so many standards, since they derived from the European Directives for the development of numerous standards within a specific time framework.

Mr. Schomer noted that we were processing some sixty (60) documents per year from TC 43/SC1 alone.

b) S12/WG2 Terminology, Abbreviations and Symbols - W.J. Galloway, Chair

At the last meeting, Mr. Galloway said he would take the existing draft of the standard and prepare it for ballot within one or two months. Accordingly, a draft of the revision of <u>ANSI S1.1-1960</u> was sent to S1 ballot (and to S2, S3, and S12 for information and comment). The ballot was submitted to S12, as <u>S12/268</u>, on 26 March 1993 and was closed on 7 May 1993, with results as given in <u>ATTACHMENT E</u>.

Mr. Johnson said that Mr. Galloway would now be chairing this working group. Mr. Young said that he had Mr. Galloway's most recent draft and would be glad to address comments on this document.

- 4. Organizational matters and reports on working groups, including reports on letter ballots and international matters (continued)
  - c) S12/WG3 Measurement of Noise from Office and Data Processing Equipment -L. Luttrell, Chair

The working group is continuing activity to review differences between ANSI S12.10-1985 and ISO 7779:1988, to identify the need for revision of either standard.

At the meeting, it was suggested that Mr. Lotz be contacted to see whether he was taking over this activity from Mr. Luttrell as he had succeeded Mr. Luttrell in the S12 representation.

d) <u>\$12/WG6 Insertion Loss of Outdoor Noise Barriers at Sites of Interest - W. Bowlby, Chair</u>

ANSI S12.8-1987 Methods for Determination of Insertion Loss of Outdoor Noise Barriers was published by ASA, and has been accepted by ISO/TC 43 as an international work item.

Mr. Johnson reported having received some revisions to the current <u>ANSI \$12.8-1987</u> but that he had not yet been able to contact Mr. Bowlby to determine the intent of the material he had received. It may be that Mr. Fleming can be contacted for more information on this subject. There may therefore be a ballot issued shortly on the revision of <u>ANSI \$12.8-1987</u>:

- e) <u>S12/WG8 Determination of Interference of Noise with Speech Intelligibility L.</u>
  Marshall, Chair
  - Ms. Brenig read Mr. Marshall's report, submitted prior to the meeting:

A draft of the ANSI Standard S3.14 Rating Noise with Respect to Speech Interference, is being written and should be circulated among the committee by Fall 1993. Unless unforeseen difficulties arise, it should be submitted for ballot in early 1994.

f) <u>\$12/WG9 Annoyance Response to Impulsive Noise - L. Sutherland, Chair</u>

Mr. Brooks reported for Mr. Sutherland, that the working group hoped to meet in Denver (October 1993). He said that he believed there should, at that time, be resolution of the proposed revisions to <u>ANSI S12.4-1986</u>.

g) S12/WG10 Hearing Protector Attenuation - C. Nixon, Chair

Mr. Nixon reported at the last meeting (see ATTACHMENT F).

- 4. Organizational matters and reports on working groups, including reports on letter ballots and international matters (continued)
  - (d) <u>\$12/WG10 Hearing Protector Attenuation C. Nixon, Chair</u> (continued)

ISO/TC 43/SC 1/WG 17 on Hearing Protection announced the receipt of a new charge from ISO to develop a standard procedure for the measurement of the sound attenuation of non-linear hearing protection devices. On two occasions meetings were scheduled to initiate this effort; however a sufficient number of WG 17 members were unable to attend and another meeting time was not scheduled. Approximately six months ago, we were advised that an initial draft standard would be prepared without a WG meeting and circulated to the members for review. On the basis of those responses, an attempt would be made to schedule a meeting. We have received no information from the Secretariat since that time. We presume that the draft proposed standard has not been completed since we have not received a copy for review.

On July 14, 1992, information and a recommended U.S. vote on ISO/DIS 4869-2.2, Estimation of effective A-Weighted sound pressure levels when hearing protectors are worn, were sent to the ASA Standards Secretariat.

- h) <u>S12/WG11 Field Effectiveness and Physical Characteristics of Hearing Protectors E. Berger, Chair</u>
  - Mr. Berger reported at the meeting (see ATTACHMENT G).

The working group will next meet in Denver, Colorado, on 7 October 1993.

i) <u>S12/WG12 Evaluation of Hearing Conservation Programs - J.D. Royster, Chair, E. Berger, Vice Chair</u>

<u>Programs</u> was published in August 1991 (see Section 3). It was submitted by ANSI to ISO/TC 43/SC1 as a proposed new work item on 21 November 1991, and accepted by the international Subcommittee.

Ms. Royster reported at the meeting (see ATTAHMENT H).

- 4. <u>Organizational matters and reports on working groups, including reports on letter ballots and international matters (continued)</u>
  - j) <u>S12/WG15 Measurement and Evaluation of Outdoor Community Noise P.D. Schomer, Chair</u>

ANSI \$12.9-1992, Part 2, Quantities and Procedures for Description and Measurement of Environmental Sound was approved by ANSI (see Section 3) and is being published by ASA. (Notice of the submittal of the proposed standard to ANSI was sent to \$12 (\$12.9/Part 2/229) on 18 June 1992.)

<u>Part 3</u> is being submitted to S12 for ballot (<u>LB/S12.9/Part 3/247</u>). The ballot was circulated on 23 November 1992 with a closing date of 4 January 1993. The results are given in <u>ATTACHMENT I</u>. Following the ballot closing, a 30-day review of the revised text was circulated (<u>30-day review/S12.9/Part 3/265</u>) on <u>31 March 1993</u>, closing on <u>3 May 1993</u>.

Mr. Schomer also reported at the last meeting that an initial draft had been prepared of <u>Part 4</u> on <u>Community Noise</u>. <u>Part 4</u> looks at the different effects of noise and descriptors to be used for dose effects and dose response relationships.

<u>Part 3</u> deals with short term measurements and <u>Part 4</u> with noise assessment. Together, the four documents (<u>Parts 1, 2, 3 and 4</u>) will form a compact series of standards dealing with the <u>Measurement and Evaluation of Outdoor Community Noise</u>.

Mr. Schomer said that there should be a meeting in Denver (October 1993) to discuss <u>Part 4</u>.

k) S12/WG18 Criteria for Room Noise - R.J. Peppin, Chair

Mr. Guernsey reported for Mr. Peppin at the last meeting, essentially that a document would soon be submitted for S12 ballot, and that S12 should be asked whether to consider the document as a proposed ANSI Standard or as a Draft ANSI Standard, for trial, comment and criticism. The document has been received by the Standards Secretariat (April 1993) and will be prepared for ballot shortly. Mr. Guernsey noted that the working group had met on Monday, 17 May 1993 to try to anticipate some of the problems that might arise as a result of the ballot on this document.

I) <u>S12/WG19 Measurement of Occupational Noise Exposure - J.P. Barry/R.</u> Goodwin, co-Chairs

The document was prepared by Mr. Goodwin for ballot in S12. Accordingly, proposed <u>ANSI S12.19-199X</u> - Measurement of Occupational Noise Exposure was sent to S12 ballot (<u>LB/S12.19/256</u>) on <u>29 January 1993</u> and closed on <u>12 March 1993</u>. The results are given in <u>ATTACHMENT J.</u>

The working group met on <u>9 April 1993</u> (in Pittsburgh, Pa.) to review the results of the ballot and to attempt to resolve the negative votes and comments.

- 4. <u>Organizational matters and reports on working groups, including reports on letter ballots and international matters (continued)</u>
  - m) <u>\$12/WG20 Specification of the Noise of New Machinery at the Operator's</u>
    Position S. Roth, Chair

ANSI S12.16-1992 was approved by ANSI and is being published by ASA (see Section 3, Page 3 of these Minutes). At the last meeting, Mr. Roth was congratulated on his efforts.

n) <u>\$12/WG21 Determination of Sound Power Using Sound Intensity</u>
<u>Measurements -M.J. Crocker, Chair</u>

ANSI \$12.12-1992 Engineering Method for the Determination of Sound Power Levels of Noise Sources Using Sound Intensity has been published by ASA.

At the last meeting, Mr. Crocker was congratulated on his work in producing this standard.

o) <u>S12/WG22 Impulse Sound Propagation for Environmental Noise Assessment -</u> N.D. Lewis, Chair

At the last meeting, it was announced that the proposed ANSI Standard, <u>\$12.17-199x</u>, had been sent to ballot (<u>LB/S12/227</u>) on 30 April 1992. The ballot was closed on 11 June 1992, with results as given in the last Minutes (<u>\$12/248</u>). ANSI's <u>Public Comment</u> period was over on 20 October 1992.

At the meeting, Mr. Luz noted that several issues needed resolution and that it would be another six months to one year before a revised text could be prepared.

p) \$12/WG23 Determination of Sound Power - P.K. Baade, Chair

Mr. Baade reported previously that the working group will next meet when the revisions of ISO 3743, 3744 and 3746 become ISO standards.

- 4. <u>Organizational matters and reports on working groups, including reports on letter ballots and international matters (continued)</u>
  - q) S12/WG27 Outdoor Measurement of Sound Pressure Level G. Daigle, Chair

The document was sent to ballot (LB/S12.18/251) on 21 December 1992, and closed on 1 February 1993 with the results as given in ATTACHMENT K.

Mr. Daigle has reported that attempts will now be made to resolve the negative votes. Mr. Daigle also writes as follows:

Comments received from the letter ballot (<u>LB/S12.18/251</u>) indicate that there is some confusion between the scope and purpose of the proposed standard S12.18, and that of S12.9, Part 3. There is also confusion with the proposed revision of S1.13. This is exactly the point raised in the report of the master planning committee for S12 (attached to the Minutes of the last S12 meeting, (<u>S12/248</u>). This confusion should be resolved as soon as possible, before I proceed to finalize the proposed Standard, S12.18.

r) <u>\$12/WG30 Revision of Power Tool Institute (PTI) Standard \$10.1-1983 - R.J. Callahan, Chair.</u>

ANSI has approved ANSI S12.15-1992 Acoustics-Portable Electric Power Tools, Stationary and Fixed Electric Power Tools, and Gardening Appliances-Measurement of Sound Emitted (revision of ANSI/PTI S10.1-1983), and the standard is being published. The working group met on 21 April 1993.

- s) <u>S12/WG31 Predicting Sound Pressure Levels Outdoors M. White, Chair</u>
  - Mr. Schomer will obtain a report from Mr. White.

At the meeting, it was decided that the confusion between the scopes of various working groups in S1 and S12 should be addressed. Mr. Daigle will prepare a summary of the issues and this will be reviewed by Messrs. Johnson and Wong.

- 4. <u>Organizational matters and reports on working groups, including reports on letter ballots and international matters (continued)</u>
  - t) <u>\$12/WG32 Revision of ANSI \$12.7-1986 Methods for Measurement of Impulse</u> Noise - P.D. Schomer, Chair
    - Mr. Schomer reported prior to the meeting as follows:

Currently, this working group is monitoring the progress of ISO where <u>ANSI S12.7-1986</u> was used as a starting point in the development of an ISO document on Impulse Sound Measurement. Currently, the ISO document still remains fundamentally similar to our ANSI document. The ISO document may advance to the stage where it can be voted on as a DIS.

Based on the ISO DIS, we may wish to propose a revision to <u>ANSI S12.7-1986</u> to place it in the new ANSI format and make it more identical with the DIS.

u) <u>\$12/WG33 Revision of ANSI \$5.1-1971 Test Code for the Measurement of Sound from Pneumatic Equipment - D. Bookshar, Chair</u>

This working group was established at the request of the Compressed Air and Gas Institute (CAGI), to revise ANSI S5.1-1971 on the above subject. The proposed standard in this area (see letter attached from <u>CAGI</u>, <u>ATTACHMENT</u> <u>L</u>) has been given the designation <u>ANSI S12.41</u> and is expected to be received for S12 ballot by early summer 1993.

- 5. <u>Listing and/or reports on Liaison working groups from other standards organizations involved in the area of noise (ATTACHMENT A)</u>
  - a) S12/L-1 IEEE 85 Committee for TAG Liaison Noise Emitted by Rotating Electrical Machines (Counterpart to ISO/TC 43/SC1/WG13) R.G. Bartheld. Chair

This liaison working group provides review of international documents and the development of procedures on measurement and evaluation of the noise produced by rotating electrical machines.

It was noted that Mr. Bartheld will attend the meeting of the international working group in Oslo.

b) <u>S12/L-2 Measurement of Noise from Pneumatic Compressors, Tools and Machines - (Vacant)</u>

Previously, it was considered by Mr. Johnson that this working group should remain on the books since it could well be needed once the tasks of <u>\$12/WG33</u> have been completed.

- 5. <u>Listing and/or reports on Liaison working groups from other standards organizations involved in the area of noise (ATTACHMENT A) (continued)</u>
  - c) <u>\$12/L-3 SAE Committee for TAG Liaison on Measurement and Evaluation of Motor Vehicle Noise (Counterpart to ISO/TC 43/SC1/WG8) R.F. Schumacher, Chair</u>
    - Mr. Schomer noted that this working group was active in reviewing ISO documents and that Mr. Schumacher would be attending the ISO/TC 43/SC1 meeting in Oslo.
  - d) <u>\$12/L-4 SAE Committee A-21 for the TAG Liaison on Measurement and Evaluation of Aircraft Noise C. Bautz, Chair</u>

Mr. Eldred said that the SAE Committee had formed a planning group to determine future activity and direction. The group had met recently, with about 50 members, and was very active.

e) S12/L-5 ASTM E-33 on Environmental Acoustics - R.M. Guernsey, Chair

At the meeting, Mr. Guernsey said he would be the liaison chair for the group acting as the counterpart for TC 43/SC2 Building Acoustics and that Robert Putnam, the Chair of ASTM E33.09 on Community Noise, would act as Chair for that liaison group.

Mr. Guernsey added that ASTM E-33 on Environmental Acoustics had decided to set up its meeting schedule in conjunction with that of ASA, meeting most likely the weekend before the ASA meeting, commencing in the Fall of 1994.

f) <u>S12/L-6 SAE Construction-Agricultural Sound Level Committee - L.A. Jennings, Chair</u>

Mr. Schomer said that this SAE group was assisting in the commenting process on the various ISO documents.

g) <u>S12/L-7 SAE Specialized Vehicle and Equipment Sound Level Committee - J.B.</u> Walsh, Chair

This group is the liaison to the SAE Specialized Vehicle and Equipment Sound.

6. Documents without working groups submitted to S12 ballot

None to date.

7. Report on standards more than five years in existence

Section 4.4 of the ANSI Procedure for the Development and Coordination of American National Standards requires that <u>each complete American National Standard</u> (including its supplements and addenda) <u>be reviewed at least every five years</u> to determine <u>whether it should be reaffirmed, revised, or withdrawn</u>. Provision is made for extensions of time, except that no extension is granted beyond ten (10) years from the date of approval by ANSI.

- a) The six (6) standards listed below required review as to their reaffirmation, revision or withdrawal. The Chair of S12 recommended that the list of standards be reaffirmed.
  - (i) ANSI S12.4-1986 Method for Assessment of High-Energy Impulsive Sounds with Respect to Residential Communities. (Reaffirmed 5 February 1993.)
  - (ii) ANSI S12.7-1986 Methods for Measurements of Impulse Noise. (Reaffirmed 5 February 1993.)
  - (iii) ANSI S12.9-1988 Quantities and Procedures for Description and Measurement of Environmental Sound, Part 1. (Reaffirmed 2 March 1993.)
  - (iv) ANSI S12.10-1985 (R 1990) Methods for the Measurement and Designation of Noise Emitted by Computer and Business Equipment (Revision of ANSI S1.29-1979).
  - (v) ANSI S12.11-1987 Methods for the Measurement of Noise emitted by Small Air-Moving Devices. (Reaffirmed 2 March 1993.)
  - (vi) ANSI S12.34-1988 Engineering Methods for the Determination of Sound Power Levels of Noise Sources for Essentially Free-Field Conditions over a Reflecting Plane. (Reaffirmed 2 March 1993.)

Accordingly, the recommendations were submitted to ANSI on 6 January 1993. ANSI notified ASA Standards on 22 February 1993 that the standards were reaffirmed on the dates given above.

### 8. Report on International Matters

a) ISO/TC 43 Acoustics and ISO/TC 43/SC1 Noise - H.E. von Gierke, TAG Chair

A report on the activities of ISO/TC 43 has been prepared by the Standards Secretariat (see <u>ATTACHMENT M</u>). Mr. Schomer's report is given in <u>ATTACHMENTS C and N</u>. The next meetings of ISO/TC 43 and ISO/TC 43/SC1 will be held from 31 May to 3 June 1993, in Oslo, Norway.

At the last meeting, Mr. Schomer, U.S. TAG Vice Chair for ISO/TC 43 and ISO/TC 43/SC1, went through the details of his plan for reviewing the numerous documents received for coordination in the U.S.. These number about 60 per year. There will be regional coordinators set up to arrange the major areas in S12 (See also under S12/Advisory, on page 3 of these Minutes).

At the meeting, Mr. von Gierke noted that there would be a very good delegation going to Oslo (14 people). Mr. Schomer said that the U.S. was now processing, mostly in S12, on the order of sixty (60) documents per year from TC43/SC1.

- b) ISO/TC 94/SC12 Hearing Protection H.E. von Gierke, TAG Chair

  Please see ATTACHMENT G for Mr. Berger's report on ISO/TC 94/SC12.
- c) International Documents Submitted to S12 for Vote and/or Comment

  See ISO/TC 43/SC1 report, ATTACHMENT M.
- 9. New international standards available from ANSI
  - ISO 6396:1992 Acoustics Measurement at the operator's position of noise emitted by earth-moving machinery. Dynamic test conditions.

### 10. Procedural Ballots

a) According to ANSI's procedures, under which the Accredited Standards Committees operate, the Officers of the Standards Committees are to be confirmed (at the beginning of their terms), as well as Individual Experts (the latter to be confirmed annually) by the respective Standards Committees.

The Officers and Individual Experts are proposed by the ASA Committee on Standards (ASACOS) as the Secretariat for the Standards Committees, in connection with the Chairs of the respective Standards Committees.

A letter ballot was circulated to S12 on 18 December 1992 (LB/S12/250) with the proposed appointments for 1993/1994. The ballot was closed on 29 January 1993 with results as given in <u>ATTACHMENT O</u>. The respective appointments will therefore take effect following the May 1993 meeting of ASA.

b) Further to discussion at the last S12 meeting, a ballot for a new work item on EVALUATION OF COMMUNICATION ABILITY IN NOISE FOR INDIVIDUALS WEARING HEARING PROTECTION was sent to S12 (LB/S12/258) on 29 January 1993. The ballot was closed on 12 March 1993 with results as given in ATTACHMENT P.

Accordingly, a new working group, <u>S12/WG35 will be established, with K. Michael as Chair.</u>

Mr. Toothman reported that this working group met on Tuesday, 18 May 1993 and would have a report (see ATTACHMENT Q).

c) Further to discussion at the last S12 meeting, a ballot for a new work item on METHODOLOGY FOR A HEARING CONSERVATION PROGRAM was sent to S12 (LB/S12/259) on 29 January 1993. The ballot was closed on 12 March 1993 with results as given in ATTACHMENT S.

Accordingly, a new working group, <u>S12/WG34</u>, will be established with R. Goodwin as Chair.

Mr. Toothman said at the meeting that efforts were under way to organize this activity and to draft a working document. The first meeting of this working group will be held on 24 June 1993.

### 11. National standards submitted to S12 for review

None to date.

### 12. Other Business

a) Project Initiation Notification System (PINS) forms requested by ANSI

The Standards Secretariat has provided ANSI, with a current list of S12 projects for use under ANSI's Project Initiation Notification System (PINS). These are expected to eventually be tabulated in a computerized system by ANSI.

b) At the last meeting, Mr. Galloway called attention to the new ASACOS EDITORIAL GUIDELINES for preparation of standards in acoustics. This document will shortly be finalized and available for chairs of preparatory working groups. The new Guidelines incorporate Part 3 of the ISO Directives (Style Manual) and the harmonized should make the national and international standards more compatible.

### 13. New Business

- a) At the last meeting, Mr. Callahan stated that NOISE LABELING FOR PRODUCTS was a concern and being looked at by the Power Tool Institute, particularly with regard to European laws and the requirements for U.S. products being sold in Europe. One problem is that in producing quieter products, hazards were found to exist where users did not know the product was in operation (e.g. knives). It was suggested that an exploratory group be formed in S12 to look into establishing a working group on this topic. Mr. Callahan agreed to review this matter and come up with a suitable scope and rationale.
- b) On the subject of <u>SOUND QUALITY GUIDELINES</u>, this is expected to result in a working group which would probably impact S3 as well as S12. Mr. Johnson said that the scope of this proposed activity will shortly be prepared for ballot. Messrs. (Gordon) Ebbit and (Earl) Geddes have agreed to co-chair this working group, if approved.
- c) Mr. Young said he proposed that, where new standards were drafted, examples of how the standard works, i.e. its application to real life, be provided in a separate document as part of the ballot. While there was consensus for this approach generally, it was not considered one that could have blanket application. The incorporation of this kind of material should be decided on a case by case basis, with the members deciding on what kind of rationale should be given for the proposed standard when it is balloted.

### 14. Future meetings

The next meeting of \$12 will be held on Thursday, 7 October 1993, in Denver, Colorado, commencing at 8:30 AM.

(The reason for the earlier time slot for the S12 meeting is to accommodate a potential Noise Session, to begin at approximately 10:00 A.M. on the same day.)

### 15. Adjournment

The meeting was adjourned at 11:00 A.M.

Avril Brenig

Standards Manager

## ACOUSTICAL SOCIETY OF AMERICA

OFFICE OF THE STANDARDS SECRETARIAT

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ATTACHMENT A-1 S12/278

### **ACCREDITED STANDARDS COMMITTEE ON NOISE - S12**

**SECRETARIAT**: Acoustical Society of America

SCOPE: Standards, specifications and terminology in the field of acoustical noise

pertaining to methods of measurement, evaluation and control; including

biological safety, tolerance and comfort and physical acoustics as

related to environmental and occupational noise.

CHAIR:

D.L. Johnson

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**Standards Secretariat** 

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Tel: (212) 661-9404 Fax: (212) 949-0473

WORKING GROUP	TITLE AND SCOPE	CHAIR
(a) S12/Advisory	S12 Advisory Planning Committee Be cognizant of standards needs within the scope of the Committee, and organize those needs in accordance with priority, and other relevant factors, into a coherent three year plan for the Committee activity. This three year plan for the preparation of standards should include those which need updating, having regard to the international work items and standards, and the need for timely review (reaffirmations, revisions, withdrawals, etc.) of all national standards, and the priority of new standards needs.	P.D. Schomer
(b) S12/WG2	Terminology, Abbreviations, and Symbols  Develop draft standard terminology, abbreviations and symbols for all areas within the scope of S12 with close liaison with counterpart working groups in S1, S2, and S3.	W.J. Galloway
(c) S12/WG3	Measurement of Noise from Office and Data Processing Equipment (counterpart to ISO/TC 43/SC1/WG23) Development of procedures for measurement and evaluation of noise emitted from computer and business equipment and their component noise sources.	L. Lutrell
(d) S12/WG6	Insertion Loss of Outdoor Noise Barriers at Sites of Interest Measurement methods applicable to the measurement and evaluation of the noise reduction provided by outdoor barriers.	W. Bowlby
(e) S12/WG8	Determination of Interference of Noise with Speech Intelligibility Review and revise ANSI S.14-1977 to determine whether the standard is current and make any necessary revisions.	L. Marshall
(f) S12/WG9	Annoyance Response to Impulsive Noise Assessment of impulsive sounds with respect to annoyance of individuals and residential communities.	L. Sutherland
(g) S12/WG10	Hearing Protector Attenuation (counterpart to ISO/TC 43/SC1/WG17) Revision of ANSI S3.19-1974 (ASA 1-1975).	C. Nixon

### **WORKING GROUP** TITLE AND SCOPE CHAIR (h) S12/WG11 Field Effectiveness and Physical Characteristics of Hearing E.H. Berger Protectors (counterpart to ISO/TC 94/SC12) The scope of the working group is twofold: A) Explore the problems inherent in using optimumlaboratory real-ear attenuation data to estimate achievable and/or typical workplace protection. Propose a plan of action to identify or develop laboratory and/or field procedure(s) that yield useful estimates of field performance. B) Assess the need for standards specifying the physical characteristics of hearing protectors that are required to provide and maintain their performance. Coordinate counterpart activities with ISO/TC 94/SC12. (i) S12/WG12 **Evaluation of Hearing Conservation Programs** J.D. Royster The goals are to specify objective criteria which can be used E.H. Berger, to assess the effectiveness of a hearing conservation Vice Chair program, and to devise a plan where the criteria can be implemented. The criteria should recognize pertinent engineering, legal, medical, audiological, and economic facts. The plan should be realistic and thus usable by persons charged with the responsibility for hearing conservation programs. (i) S12/WG15 Measurement and Evaluation of Outdoor Community Noise P.D. Schomer To produce a standard for the measurement of outdoor environmental noise with emphasis on the classification of noise surveys relative to temporal and spatial sampling accuracies achieved. (k) S12/WG18 Criteria for Room Noise R.J. Peppin To develop a method for rating the noise encountered in various types of rooms in terms of its effect upon people by means of 1) a weighing network, and 2) a computational procedure to account for temporal pattern of the noise and the need for tone correction as appropriate. The purpose of this method is to arrive at a common yardstick for evaluating environmental noise indoors. In addition to this main charge, also charged with the development and measurement procedures to be utilized in various types of rooms including methods for translating the results of such measurement in the common yardstick. (I) S12/WG19 Measurement of Occupational Noise Exposure (partial J.P. Barry/ counterpart to ISO/TC 43/SC1/WG19 - ISO 9612) R. Goodwin Development of a method to evaluate a person's noise Co-chairs

exposure received in a workplace. This method must

hearing loss.

recognize pertinent engineering, legal, medical, audiological, and economic facts. The results must be practical, realistic, reproducible, and relevant to prevention of occupational

### **CHAIR WORKING GROUP TITLE AND SCOPE** (m) S12/WG20 Specification of the Noise of New Machinery at the S.I. Roth **Operator's Position** Develop a method for measurement and specification of the level of noise at the operator(s) position for newly manufactured machinery in a manner that is suitable for inclusion in other documents that specify the manner of operation and loading of the machine. Five consideration to other existing national and international efforts in a purchase specification, to measurement of total sound power and to evaluate the additive effect of the noise of multiple machines to the level of noise at the operator's position so that a specified level could be related to a selected level for "in use" conditions. (n) S12/WG21 **Determination of Sound Power Using Sound Intensity** M.J. Crocker Measurements Specify methods for measuring sound intensity directly on a measurement surface enveloping a sound source and for calculating the sound power radiated by that source. Methods shall be developed as appropriate for all types of machinery, equipment and radiating surfaces, but shall not include the power radiated from moving vehicles or air moving devices. The working group shall maintain liaison with any activity in this area by ISO/TC 43. (c) S12/WG22 Impulse Sound Propagation for Environmental Noise N.D. Lewis Assessment Establish an engineering method to specify average propagation for a distribution of blast noise events for purposes of environmental noise assessment. The methods should apply to high-energy impulse sounds at moderate distances (1-30 km) from sources such as demolition or mining blasting, artillery firing and bomb explosions using conventional explosives of less than approximately one ton. Prevailing meteorological conditions and terrain should be considered when practicable. (p) S12/WG23 **Determination of Sound Power** P.K. Baade Monitor the sound power series of standards (i.e. \$12.30, 31, 32, 33, 34, 35, and 36) and revise as necessary. **Outdoor Measurement of Sound Pressure Level** G. Daigle (q) S12/WG27 Develop standardization methods for measuring sound pressure levels in the outdoor environment, considering the effects of refraction due to wind and temperature gradients. the effects due to thermal and mechanical turbulence and the effects of variable ground impedance and wind noise. Close coordination should be maintained with working group S1/WG4 which is revising ANSI S1.13 Measurement of

**Sound Pressure Levels** 

WORKING GROUP	TITLE AND SCOPE	CHAIR
(r) S12/WG30	Revision of Power Tool Institute (PTI) Standard S10.1-1983 Ame Can National Standard for Acoustics Portable Electric Power Tools, Stationary and Fixed Electric Powered Tools and Gardening Appliances. Measurement of Sound Emitted (proposed as an ANSI Standard under the jurisdiction of Accredited Standards Committee S12, Noise).	R.J. Çallahan
(s) S12/WG31	Predicting Sound Pressure Levels Outdoors  Develop standard method for calculating the attenuation of sound during propagation outdoors in order to predict the levels of noise at a distance from a large variety of sources. The method should be a general engineering procedure that includes the combined effects of: geometrical divergence, atmospheric absorption, the effects of variable ground impedance, the effects of refraction due to wind and temperature gradients, the effects due to thermal and mechanical turbulence, reflection from surfaces, as well as propagation through foliage.	M. White
(t) S12/WG32	Revision of ANSI S12.7-1986 Methods for Measurement of Impulse Noise	P.D. Schomer
(u) S12/WG33	Revision of ANSI S5.1-1971 Test Code for the Measurement of Sound from Pneumatic Equipment  Develop standards on the measurement of all types of pneumatic equipment such as air tools, hoists, rock drills, paving breakers, etc.	D. Bookshar
(v) S12/WG34	Methodology for a Hearing Conservation Program Develop a methodology for a hearing conservation program. The methodology must recognize pertinent engineering, medical, audiological, legal, and economic facts. The program must be practical, realistic, reproducible, and relevant to the prevention of occupational hearing loss.	R. Goodwin
(w) S12/WG35	Evaluation of Communication Ability in Noise for Individuals Wearing Hearing Protection  The development of a method of predicting the ability of an individual to communicate in noise while wearing hearing protection. The method will be applicable to individuals with normal hearing and to individuals with mild, moderate and severe hearing losses. The purpose is to allow the selection of hearing protection that prevents noise-induced hearing loss but that does not unnecessarily inhibit communication. The use of proper hearing protection optimizes verbal communication, warning signal recognition and recognition of machine operating sounds.	K. Michael

WORKING GROUP	TITLE AND SCOPE	CHAIR
	LIAISON WORKING GROUPS FROM OTHER STANDARDS ORGANIZATIONS ACTIVE IN THE AREA OF NOISE	
(a) S12/L-1	IEEE 85 Committee for TAG Liaison - Noise Emitted by Rotating Electrical Machines (counterpart to ISO/TC 43/SC1/WG13) Review of international documents and the development of procedures of measurement evaluation of the noise produced by rotating electrical machines.	R.G. Bartheld
(b) S12/L-2	Measurement of Noise from Pneumatic Compressors Tools and Machines (counterpart to ISO/TC 43/SC1/WG9).	(vacant)
(c) S12/L-3	SAE Committee for TAG Liaison on Measurement and Evaluation of Motor Vehicle Noise (counterpart to ISO/TC 43/SC1/WG8)  To provide input to the ISO/TC 43/SC1 TAG for the formulation of U.S. positions on international proposals from WG8 and recommendations for new ISO projects in its area.	R.F. Schumacher
(d) S12/L-4	SAE Committee A-21 for TAG Liaison on Measurement and evaluation of Aircraft Noise - (International counterpart in ISO is currently inactive.)	C. Bautz
(e) S12/L-5	ASTM E-33 on Environmental Acoustics The development of standards on the characteristics and performance of materials, products, systems, and services relating to the acoustical environment and the promotion of related knowledge (tc include the activities of ASTM E33.06 on Building Acoustics, counterpart to ISO/TC 43/SC2 and ASTM E33.09 on Community Noise).	R.M. Guernsey
(f) S12/L-6	SAE Construction-Agricultural Sound Level Committee Review of international documents and the development of procedures on measurement and evaluation of both operator station and exterior sounds for mobile self-propelled construction, mining, forestry and agricultural machinery.	L.A. Jennings
(g) S12/L-7	SAE Specialized Vehicle and Equipment Sound Level Committee Responsible for all SAE technical matters concerning sound emission, and its measurement, of surface vehicles, powered equipment, and their components which are under the direction of the Specialized Vehicle and Equipment Council.	J.B. Walsh

STATUS:

FIELD

COMMITTEE	S12 NOISE				
DESIGNATION/ EDITION	SUBJECT OR TITLE	STATUS	ACTIVITY	МЕТНОD	COMMENTS OR EXPECTED DATE OF SUBMISSION TO ANSI
S3.14-1977 (R 1986)	Rating Noise with Respect to Speech Interference (S12/WG8)	se RV;SP	+	S	
S3.19-1974 (R 1990)	Method for the Measurement of Real-Ear Protection of Hearing Protectors and Physical Attenuation of Earmuffs ( <u>S12/WG10</u> )	RV;SP	-	ဟ	Partially superseded by S12.6-1984. Remainder to be superseded by new standard being written
S12.1-1983 (R 1990)	Guidelines for the Preparation of Standard Procedures for the Determination of Noise Emission	NA .		<b>ග</b>	
S12.2-199X	Criteria for Room Noise ( <u>S12/WG18</u> ) (i) Criteria for time-varying noise (ii) Criteria for steady-use room noise (iii) Method for measuring room noise	NS;SP	က	σ	
S NS- NEW STANDARD IN PROCESS RF- REAFFIRMATION IN PROCESS RV- REVISION IN PROCESS WD- WITHDRAWAL IN PROCESS ES- ENVIRONMENTAL SOUND SP- SUBMITTED PINS FORMS	STATUS  NR- NEEDS REVIEW  AP- ANSI APPROVED  OP- OUT OF PRINT  NA- NOT AVAILABLE  UD- UP TO DATE	ACTIVITY 0- NONE 1- FORMATIVE STAGE 2- DRAFTING STANDARD 3- VOTING ON PROPOSAL 4- ANSI STANDARDS ACTION 5- OBJECTIONS BEING CONSIDERED 6-ANSI CONSIDERING APPROVAL	Y L TION DNSIDERED	METHOD C-ACCRE O-ACCRE S-ACCRE	METHOD C-ACCREDITED CANVASS O-ACCREDITED ORANIZATION S-ACCREDITED STANDARDS COMMITTEE X-NOT INTENDED FOR ANSI

STATUS:

FIELD

COMMITTEE:	S12 NOISE					
DESIGNATION/ EDITION	SUBJECT OR TITLE	тітсе	STATUS	ACTIVITY	МЕТНОБ	COMMENTS OR EXPECTED DATE OF SUBMISSION TO ANSI
S12.3-1985 (R 1990)	Statistical Met Stated Noise E Equipment (cor	Statistical Method for Determining and Verifying Stated Noise Emission Values of Machinery and Equipment (counterpart to <u>ISO/DIS 7574)</u> (S12/WG7)	an an		v	
S12.4-1986 (R 1993)	Method for As: Sounds with R (S12/WG9)	Method for Assessment of High-Energy Impulsive Sounds with Respect to Residential Communities (S12/WG9)	an s	ı	S	
S12.5-1990	Requirements of Reference S	Requirements for the Performance and Calibration of Reference Sound Sources (ISO/DIS 6926) (S12/WG23)	an n		S	
S12.6-1984 (R 1990)	Method for the Attenuation of	Method for the Measurement of the Real-Ear Attenuation of Hearing Protectors (\$12/WG10)	an		S	
S12.7-1986 (R 1993)	Methods for th (S12/WG32)	Methods for the Measurement of Impulse Noise (\$12/WG32)	RV;SP		S	
512.8-1987	Methods for th Outdoor Noise	Methods for the Determination of Insertion Loss of Outdoor Noise Barriers (\$12/WG6)	of UD	3	S	
S NS- NEW STANDARD IN PROCESS RF- REAFFIRMATION IN PROCESS RV- REVISION IN PROCESS WD- WITHDRAWAL IN PROCESS ES- ENVIRONMENTAL SOUND SP- SUBMITTED PINS FORMS	TATUS	NR- NEEDS REVIEW AP- ANSI APPROVED OP- OUT OF PRINT NA- NOT AVAILABLE UD- UP TO DATE	ACTIVITY  0- NONE  1- FORMATIVE STAGE  2- DRAFTING STANDARD  3- VOTING ON PROPOSAL  4- ANSI STANDARDS ACTION  5- OBJECTIONS BEING CONSIDERED  6-ANSI CONSIDERING APPROVAL	rion Sinsidered Proval	METHOD C-ACCRE O-ACCRE S-ACCRE X-NOT IN	METHOD C-ACCREDITED CANVASS O-ACCREDITED ORANIZATION S-ACCREDITED STANDARDS COMMITTEE X-NOT INTENDED FOR ANSI

FIELD	STATUS:					
COMMITTEE:	S12 NOISE					
DESIGNATION/ EDITION	SUBJECT OR TITLE	R TITLE	STATUS	ACTIVITY	МЕТНОБ	COMMENTS OR EXPECTED DATE OF SUBMISSION TO ANSI
S12.9-1988/ Part 1 (R 1993)	Ouantities ar Measuremen (S12/WG15)	Quantities and Procedures for Description and Measurement of Environmental Sound <u>Part 1</u> (S12/WG15)	an	0	S	
S12.9-1992/ Part 2	Ouantities ar Measuremen (S12/WG15)	Quantities and Procedures for Description and Measurement of Environmental Sound <u>Part 2</u> (S12/WG15)	an		S	
S12.9-199X Part 3	Quantities ar Measuremen (S12/WG15)	Quantities and Procedures for Description and Measurement of Environmental Sound Part 3 (S12/WG15)	NS	4	S	
S12.9-199X Part 4	Quantities ar Measuremen (\$12/WG15)	Quantities and Procedures for Description and Measurement of Environmental Sound Part 4 (\$12/WG15)	NS	1	ဟ	
S12.10-1985 (R 1990)	Methods for the Meas Noise Emitted by Com Equipment (\$12/WG3) (revision of ANSI \$1.2	Methods for the Measurement and Designation of Noise Emitted by Computer and Business Equipment (\$12/WG3) (revision of ANSI \$1.29-1979)	QD J			
S NS- NEW STANDARD IN PROCESS RF- REAFFIRMATION IN PROCESS RV- REVISION IN PROCESS WD- WITHDRAWAL IN PROCESS ES- ENVIRONMENTAL SOUND SP- SUBMITTED PINS FORMS	STATUS IN PROCESS IN PROCESS CESS V PROCESS SOUND FORMS	NR- NEEDS REVIEW AP- ANSI APPROVED OP- OUT OF PRINT NA- NOT AVAILABLE UD- UP TO DATE	ACTIVITY 0- NONE 1- FORMATIVE STAGE 2- DRAFTING STANDARD 3- VOTING ON PROPOSAL 4- ANSI STANDARDS ACTION 5- OBJECTIONS BEING CONSIDERED 6-ANSI CONSIDERING APPROVAL	rion Insidered Proval	METHOD C-ACCRE O-ACCRE S-ACCRE X-NOT IN	METHOD C-ACCREDITED CANVASS O-ACCREDITED ORANIZATION S-ACCREDITED STANDARDS COMMITTE X-NOT INTENDED FOR ANSI

COMMENTS OR EXPECTED DATE OF SUBMISSION TO ANSI

**METHOD** 

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# STATUS REPORT

FIELD	<u>STATUS</u> :		
COMMITTEE:	S12 NOISE		
DESIGNATION/ EDITION	SUBJECT OR TITLE	STATUS	ACTIVITY
S12.11-1987 (R 1993)	Methods for the Measurement of Noise Emitted by NS;SP Air-Moving Devices (\$12/WG3)	NS;SP	2
\$12.12-1992	Determination of Sound Power Using Sound Intensity Measurements (\$12/WG21)	gn .	
Draft S12.13-1991	Evaluation of Hearing Conservation Programs (\$12/WG12)	UD;SP	
S12.14-1992	Methods for the Field Measurement of the Sound Output of Audible Public Warning Devices Installed at Fixed Locations Outdoord (\$12/WG29)	g,	
S12.15-1992	Revision of <u>ANSI/PTI S10.1-1983</u> - Portable Electric Power Tools, Stationary and Fixed Electric Powered Tools and Gardening Appliances.	<u>o</u>	

METHOD	C-ACCREDITED CANVASS	O-ACCREDITED ORANIZATION	S-ACCREDITED STANDARDS COMMITTEE	X-NOT INTENDED FOR ANSI	•	
ACTIVITY	0- NONE	1- FORMATIVE STAGE	2- DRAFTING STANDARD	3- VOTING ON PROPOSAL	4- ANSI STANDARDS ACTION	5- OBJECTIONS BEING CONSIDERED 6-ANSI CONSIDERING APPROVAL
US	NR- NEEDS REVIEW	AP- ANSI APPROVED	OP- OUT OF PRINT	NA- NOT AVAILABLE	UD- UP TO DATE	
STATUS	NS- NEW STANDARD IN PROCESS	RF. REAFFIRMATION IN PROCESS	RV- REVISION IN PROCESS	WD- WITHDRAWAL IN PROCESS	ES- ENVIRONMENTAL SOUND	SP- SUBMITTED MNS FORMS

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Specification of the Noise of New Machinery at

\$12.16-1992

the Operator's Position (S12/WG20)

Measurement of Sound Emitted (S12/WG30)

S

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STATUS:

FIELD

COMMITTEE	S12 NOISE				
DESIGNATION/ EDITION	SUBJECT OR TITLE	STATUS	ACTIVITY	METHOD	COMMENTS OR EXPECTED DATE OF SUBMISSION TO ANSI
S12.17-199X	Impulse Sound Propagation for the Environmental Noise Assessment (\$12/WG22)	NS		S	
S12.18-199X	Outdoor Measurement of Sound Pressure Level	NS	3	S	
S12.19-199X	Measurement of Occupational Noise Exposure (S12/WG19)	NS	က	တ	
\$12.23-1989	Method for the Designation of Sound Power Emitted by Machinery and Equipment (revision of ANSI S1.23-1976 and ANSI S3.17-1975)	<u>a</u>		ω	
S12.30-1990	Guidelines for the Use of Sound Power Standards and for the Preparation of Noise Test Codes (counterpart to ISO 3740: 1980) (S12/WG23) (Revision and Redesignation of ANSI S1.30-1979)	9		ω	
S12.31-1990	Precision Methods for the Determination of Sound Power Levels of Broad-Band Noise Sources in Reverberation Rooms (counterpart to ISO 3741: 1975) (\$12/WG23) (Revision and Redesignation of ANSI \$1.31-1979)	9		ω	
S NS- NEW STANDARD IN PROCESS RF- REAFFIRMATION IN PROCESS RV- REVISION IN PROCESS WD- WITHDRAWAL IN PROCESS ES- ENVIRONMENTAL SOUND SP- SUBMITTED PINS FORMS	STATUS IS NR- NEEDS REVIEW S AP- ANSI APPROVED OP- OUT OF PRINT NA- NOT AVAILABLE UD- UP TO DATE	ACTIVITY O- NONE 1- FORMATIVE STAGE 2- DRAFTING STANDARD 3- VOTING ON PROPOSAL 4- ANSI STANDARDS ACTION 5- OBJECTIONS BEING CONSIDERED 6-ANSI CONSIDERING APPROVAL	Y L TION ONSIDERED PROVAL	METHOD C-ACCRE O-ACCRE S-ACCRE	METHOD C-ACCREDITED CANVASS O-ACCREDITED ORANIZATION S-ACCREDITED STANDARDS COMMITTEE X-NOT INTENDED FOR ANSI

FIELD	STATUS:				
COMMITTEE:	S12 NOISE				
DESIGNATION/ EDITION	SUBJECT OR TITLE	STATUS	ACTIVITY	МЕТНОБ	COMMENTS OR EXPECTED DATE OF SUBMISSION TO ANSI
\$12.32-1990	Precision Methods for the Determination of Sound Power Levels of Discrete-Frequency and Narrow-Band Noise Sources in Reverberation Rooms (counterpart to ISO 3742: 1975) (S12/WG23) (Revision and Redesignation of (ANSI S1.32-1979)	gn .		v	
S12.33-1990	Engineering Methods for the Determination of Sound Power Levels of Noise Sources in a Special Reverberation Test Room (counterpart to <u>ISO</u> <u>3743: 1976</u> ) ( <u>S12/WG23</u> ) (Revision and Redesignation of <u>ANSI S1.33-1979</u> )	an		σ	
S12.34-1988 (R 1993)	Engineering Methods for the Determination of Sound Power Levels of Noise Sources for Essentially Free-Field Conditions Over a Reflecting Plane (counterpart to ISO 3744: 1981) (\$12/WG23) (Revision and Redesignation of ANSI \$1.34-1980)	g		v	

S-ACCREDITED STANDARDS COMMITTEE

X-NOT INTENDED FOR ANSI

5- OBJECTIONS BEING CONSIDERED 6-ANSI CONSIDERING APPROVAL

4- ANSI STANDARDS ACTION

NA- NOT AVAILABLE UD- UP TO DATE

NR- NEEDS REVIEW AP- ANSI APPROVED

STATUS

NS- NEW STANDARD IN PROCESS

RF- REAFFIRMATION IN PROCESS

RV- REVISION IN PROCESS

WD- WITHDRAWAL IN PROCESS ES- ENVIRONMENTAL SOUND SP- SUBMITTED PINS FORMS

OP- OUT OF PRINT

1- FORMATIVE STAGE
2- DRAFTING STANDARD
3- VOTING ON PROPOSAL

0-ACCREDITED ORANIZATION

C-ACCREDITED CANVASS

METHOD

ACTIVITY

O- NONE

STATUS:

FIELD

COMMITTEE:	S12 NOISE				
DESIGNATION/ EDITION	SUBJECT OR TITLE	STATUS	ACTIVITY	МЕТНОБ	COMMENTS OR EXPECTED DATE OF SUBMISSION TO ANSI
S12.35-1990	Precision Methods for the Determination of Sound Power Levels of Noise Sources in Anechoin and Semi-Anehoic Rooms (counterpart to ISO 3745: 1977) (\$12/W623) (Revision and Redesignation of ANSI \$1.35-1979)	an an		ဟ	
S12.36-1990	Survey Methods for the Determination of Sound Power Levels of Noise Sources (counterpart to <u>ISO</u> <u>3746: 1979</u> ) ( <u>\$12/WG23</u> ) (Revision and Redesignation of <u>ANSI \$1.36-1979</u> )	g n		w	
S12.37-199X	Determination of Sound Power Levels of Sound Sources. Methods for in situ Measurement Using a Reference Sound Source (counterpart to <u>ISQ</u> 3747: 1987) ( <u>S12/WG23</u> )	NS;SP	2	S	
S12.40-1990	Sound Level Descriptors for Determination of Compatible Land Use (S12/WG15) (Revision and Redesignation of ANSI S3.23-1980)	an		S	

METHOD	C-ACCREDITED CANVASS	O-ACCREDITED ORANIZATION	S-ACCREDITED STANDARDS COMMITTEE	X-NOT INTENDED FOR ANSI			
ACTIVITY	0- NONE	1- FORMATIVE STAGE	2- DRAFTING STANDARD	3- VOTING ON PROPOSAL	4- ANSI STANDARDS ACTION	5- OBJECTIONS BEING CONSIDERED	6-ANSI CONSIDERING APPROVAL
STATUS	NR- NEEDS REVIEW	AP- ANSI APPROVED	OP- OUT OF PRINT	NA- NOT AVAILABLE	UD- UP TO DATE		
	<b>NS- NEW STANDARD IN PROCESS</b>	RF- REAFFIRMATION IN PROCESS	RV- REVISION IN PROCESS	WD- WITHDRAWAL IN PROCESS	ES- ENVIRONMENTAL SOUND	SP. SUBMITTED PINS FORMS	

FIELD STATUS:

COMMITTEE: S12 NOISE

DESIGNATION/ EDITION	SUBJECT OR TITLE	STATUS	STATUS ACTIVITY	МЕТНОВ	COMMENTS OR EXPECTED DATE OF SUBMISSION TO ANSI
S12.XX-199X	Measurement and Evaluation of Outdoor Community Noise (\$12/WG15)	NS;SP	-	S	
S12.XX-199X	Predicting Sound Pressure Levels Outdoors (counterpart to ISO/TC 43/SC1/WG24) (S12/WG31)	NS;SP	-	w	
S12.41-199X	Acoustics - Air Tools and Small Air-driven Machinery. Measurement of Sound Emitted. (\$12/WG33)	. A	<b>*</b>	ဟ	Revision of CAGI Standard S5.1-1971

STATUS

NS- NEW STANDARD IN PROCESS

RF- REAFFIRMATION IN PROCESS

RV- REVISION IN PROCESS

OP- OUT OF PRINT

WD- WITHDRAWAL IN PROCESS

RS- ENVIRONMENTAL SOUND

UD- UP TO DATE

SP- SUBMITTED PINS FORMS

ACTIVITY
0- NONE
1- FORMATIVE STAGE
2- DRAFTING STANDARD

4- ANSI STANDARDS ACTION 5- ORJECTIONS BEING CONSIDERED 6-ANSI CONSIDERING APPROVAL

3- VOTING ON PROPOSAL

METHOD
C-ACCREDITED CANVASS
O-ACCREDITED ORANIZATION
S-ACCREDITED STANDARDS COMMITTEE
X-NOT INTENDED FOR ANSI

March 29, 1993

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The following is the reports by Paul Schomer for S12 WG1, WG15, WG32 and TC43 and SC1.

### S12 WG1:

Efforts have continued on methods to streamline the functioning of the S12 Committee. In S12 we face three formidable tasks. First, we face the huge challenge of representing US interests and ANSI in ISO. Overall, there are over 50 documents under some stage of development within ISO TC 43/SC 1 which fall under the purview of the S12 committee. Second, we have the continuing need to identify priorities for new work and to critically examine existing Standards as they come due for review. Finally we must increase our efforts to coordinate ANSI, ISO, and other documents and better insure that conflicting requirements and definitions do not reach the public.

In an attempt to better perform these three tasks, we are organizing our S12 effort into 7 major technical thrust areas. Each area will have an area leader or, in a few cases, two coleaders. It will be the task of these technical area leaders to:

- 1. Recommend new work efforts and documents requiring updating in their area.
- 2. Coordinate among the different documents in the technical area including ANSI, ISO and other Standards documents, identify conflicts, and develop plans and work to eliminate any conflicts.
- 3. Coordinate and streamline US input to ISO documents by maintaining cognizance of ongoing work efforts. Develop a core group of individuals who will be able and willing to coordinate and provide meaningful input to US review. Assist the S-12 Chair with the identification of US delegates to ISO working groups and meetings.

Note: The technical area leaders are not expected to do all the coordination of the US review. Rather, it is expected that they will help identify and establish a group of people who will comment on documents in their area, and a smaller group who will assist with the coordination of documents.

### TC 43 and TC 43 SC1

We are well prepared for the upcoming meeting in Oslo (31 May to 4 June); we have the largest U.S. delegation in recent memory. We have processed or are processing about 25 ISO documents in the last 6 months—an almost unbelievable rate. The new subgroups to S12 are beginning to help in this process.

More help is still needed—especially in the area of work-place noise and quite factories. Steve Roth and Bennett Brooks are doing a great job with documents (they, and especially Steve) have taken about 1/2 of the ISO load; but I am sure they would appreciate additional help.

In all of the areas, the more comments we get on ISO documents, the better we can make our U.S. input.

We are always looking for additional people who can actively participate in working groups and travel frequently to Europe.

### S12 WG15

S12-9 Part 2 has been fully approved and is in the publication process. It will have a 1992 date.

S12-9 Part 3 had one negative vote which has been resolved and had one negative position by an individual expert for which much effort has been expended. By the time of this report, S12-9 Part 3 will have been through 30-day review of the S12 committee.

Initial sections of S12-9 Part 4 have been drafted.

### S12 WG32

Currently, this committee is monitoring the progress of ISO where ANSI S12-7 was used

## Our division into technical areas and leaders is:

	S12 WGs	ISO SC 1 WGs	Technical Area	Leader(s)
Α	23, 21,3 30, 33 L1, L2	13, 23* 25 28, 22	sound power, rating, labelling	J. Malosh
В	10 11 12, 19	17 19 TC 43/WG5	hearing conservation	Berger
С	9, 15 22, 27 31, 32	24 26 30	environmental (propagation, assessment)	Sutherland
D	7 20 8	23° 34 35	work-place design noise at the operator low-noise machinery	Brooks Roth
Е	6 L3	27 29 32, 33	vehicle noise	Konheim Schumacher
F	18 L5	31 36 new HVAC	noise attenuaters building acoustics	Guernsey
G	1 2 L4, L6	37 new	construction aircraft other	Chair, S.2 vice-Chair, S12

Split responsibility; sound power to Area A, sound pressure at the operator or bystander to Area D.

## ACOUSTICAL SOCIETY OF AMERICA

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and Business Equipment (Revision of ANSI

S1.29-1979)

ATTACHMENT D-1 S12/278

### **S12 NOISE**

ANSI \$12.1-1983 (R 1990) Guidelines for the Preparation of Standard Procedures for the Determination of Noise **Emission from Sources** Statistical Methods for Determining and ANSI \$12.3-1985 (R 1990) Verifying Stated Noise Emission Values of **Machinery and Equipment** ANSI \$12.4-1986 Method for Assessment of High-Energy (R 1993) Impulsive Sounds with Respect to Residential Communities **ANSI S12.5-1990** Requirements for the Performance and Calibration of Reference Sound Sources ANSI S12.6-1984 (R 1990) Method for the Measurement of the Real-Ear Attenuation of Hearing Protectors **ANSI S12.7-1986** Methods for Measurements of Impulse Noise (R 1993) Methods for Determination of Insertion **ANSI S12.8-1987 Loss of Outdoor Noise Barriers** ANSI \$12.9-1988 Quantities and Procedures for Description and Measurement of Environmental Sound Part 1 (R 1993) Part 1 ANSI \$12.9-1992 Quantities and Procedures for Description and Measurement of Outdoor Part 2 **Environmental Sound** ANSI S12.10-1985 Methods for the Measurement and **Designation of Noise Emitted by Computer** 

## **S12 NOISE (continued)**

<u>ANSI S12.11-1987</u> (R 1993)	Methods for the Measurement of Noise Emitted by Small Air-Moving Devices
ANSI S12.12-1992	Engineering Method for the Determination of Sound Power Levels of Noise Sources Using Sound Intensity
DRAFT ANSI \$12.13-1991	Evaluating the Effectiveness of Hearing Conservation Programs
ANSI S12.14-1992	Methods for the Field Measurement of the Sound Output of Audible Public Warning Devices Installed at Fixed Locations Outdoors
ANSI S12.15-1992	Acoustics - Portable Electric Power Tools, Stationary and Fixed Electric Power Tools, and Gardening Appliances. Measurement of Sound Emitted.
ANSI S12.16-1992	Guidelines for the Specification of Noise of New Machinery
ANSI S12.23-1989	Method for the Designation of Sound Power Emitted by Machinery and Equipment
ANSI S12.30-1990	Guidelines for the Use of Sound Power Standards and for the Preparation of Noise Test Codes
ANSI S12.31-1990	Precision Methods for the Determination of Sound Power Levels of Broad-Band Noise Sources in Reverberation Rooms
ANSI S12.32-1990	Precision Methods for the Determination of Sound Power Levels of Discrete-Frequency and Narrow-Band Noise Sources in Special Reverberation Rooms
ANSI \$12.33-1990	Engineering Methods for the Determination of Sound Power Levels of Noise Sources in a Special Reverberation Test Room

## ATTACHMENT D-3 S12/278

## **S12 NOISE (continued)**

<u>ANSI S12.34-1988</u> (R 1993)	Engineering Methods for the Determination of Sound Power Levels of Noise Sources for Essentially Free-Field Conditions over a Reflecting Plane
ANSI S12.35-1990	Precision Methods for the Determination of Sound Power Levels of Noise Sources in Anechoic and Hemi-Anechoic Rooms
ANSI \$12.36-1990	Survey Methods for the Determination of Sound Power Levels of Noise Sources
ANSI S12.40-1990	Sound Level Descriptors for Determination of Compatible Land Use

## ACOUSTICAL SOCIETY OF AMERICA

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> ATTACHMENT E-1 S12/278 11 May 1993

TO: G.S.K. Wong, Chair S1

Re: Letter Ballot LB/S1.1/380 sent to the Accredited Standards Committee S1 for vote (and to S2, S3 and S12

for review and comment) on 26 March 1993, and closed

on 5 May 1993

SUBJECT: Approval of proposed revision of ANSI S1.1-1960 (R 1976)

Acoustical Terminology, draft dated March 1993

Enclosed please find tally of the above letter ballot, showing results as follows:

## **CLASSIFICATION OF MEMBERS**

	3
NEGATIVE VOTES 3 C - CONSUMER	•
ABSTENTIONS 0 G - GOVERNMENT	6
NOT RETURNED 8 GI - GENERAL INTEREST	3
<del></del>	_
TOTAL 17 TOTAL	<u>17</u>

## Continuation of results of letter ballot \$1.1/380:

## **AFFIRMATIVE VOTES:**

Arrington, J.

U.S. Army Primary Standards Laboratory National Council of Acoustical Consultants

Augspurger, G.L. (Alt.) Fung, T.

**U.S. Army Communication Electronics Command** 

Mayer, M.S.

AT&T

Michel, G.C.

Bruel & Kjaer Instruments, Inc.

Sepmeyer, L.W.

**Audio Engineering Society** 

### **NEGATIVE VOTES:**

Bohl, C.D.

American Industrial Hygiene Association

Schomer, P.D.

**Acoustical Society of America** 

Schomer, P.D.

**U.S. Army Construction Engineering** 

**Research Laboratory** 

## **ABSTENTIONS:**

### NONE

#### **NOT RETURNED:**

Anderson, R.

**Larson-Davis Laboratories** 

Kalb, J.

U.S. Army Human Engineering Laboratory

Linderoth, R.T.

Sonetronics, Inc.

Lotz, R.

Computer & Business Equipment Manufacturers, Assn.

McKinley, R.

U.S. Department of the Air Force (USAF)
U.S. Army Aeromedical Research Laboratory

Mozo, B.

Nedzelnitsky, V.

National Institute of Standards

and Technology

Wang, S.

Air-Conditioning & Refrigeration

Institute

## LATE RESPONSE:

NONE

## Continuation of results of letter ballot \$1.1/380:

## **INDIVIDUAL EXPERTS:**

1) Individual Experts stating they <u>will participate</u> in the review of this document:

Ehrlich, S.L. Thornton, W.R.

2) Individual Experts stating they <u>will not participate</u> in the review of the document:

Flynn, D.R.

3) Comments and/or recommendations were <u>received from 3 Individual</u> <u>Expert(s)</u> as follows:

Ehrlich, S.L.

**Negative Comments** 

Flynn, D.R.

**Affirmative Comments** 

Thornton, W.R.

**Affirmative Comments** 

## **OTHER**

See Attached sheets

Avril Brenig Standards Manager

cc: Vice Chair, Standards Committee S1
Chair and Vice Chair, ASACOS
Chair, Working Group



## ACOUSTICAL · SOCIETY · OF · AMERICA

ATTACHMENT E-4. S12/278

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IMMEDIATE RETURN REQUESTED

LB/S1.1/380 26 March 1993

Return to:

Letter Ballot Department

Due date:

7 May 1993

LETTER BALLOT ACCREDITED STANDARDS COMMITTEE ON ACOUSTICS, S1

<u>Topic</u>: Approval of proposed revision of ANSI S1.1-1996, (R 1976) Acoustical Terminology, draft dated March 1993

Authorized for circulation by:

G.S.K. Wong, Chair S1

Circulated by:

A. Brenig, ASA Standards &

Reference Document(s):

Proposed revision of ANSI S1.1-1960 (R 1976) Acoustical Terminology, draft dated March 1993 /LB/S1

Memo from W.J. Galloway to Chairs, Standards Committees S1, S2, S3 S12, ASA Standards Director and ASA Standards

Manager, dated 5 January 1993

ATTACHMENT C

Letter from G.S.K. Wong to A. Erenig, dated 12 March 1993

## Background Information:

This proposed revision of ANSI S1.1-1960 Acoustical Terminology, draft dated March 1993, has been prepared by an ad hoc group, chaired by W.J. Galloway, which assisted Accredited Standards Committee S1 in its preparation.

G.S.K. Wong, Chair, Accredited Standards Committee S1, Acoustics, and the chair of the adhoc group, W.J. Galloway, both recommend approval of the current draft as a proposed ANSI standard.

This document is being circulated to S1 for vote, and to S2, S3 and S12 for information and comment. Any changes which are submitted in response to this ballot must be accompanied by proposed textual changes given in writing. These proposed changes should be given on separate sheets of paper, not incorporated in the document itself.

#### **MEMORANDUM 9304**

Subject: Draft Revision of S1.1-1960 (R1976) Acoustical

Terminology

From: W.J. Galloway

To: Chairs, Standards Committees S1, S2, S3, S12,

ASA Standards Director, ASA Standards Manager

Date: 5 January 1993

The enclosed draft for a revised S1.1-1960 is, I believe, ready for ballot. Section 13 on music is as I received it from R.W.Young. It is not precisely in the same format as the rest of the document, but it is about 98% so. I will retype it into the same format as the rest of the document in the next day or so, but the text will remain the same.

The annex containing the alphabetical index could stand some editing- I wasn't as sophisticated as I should have been in the sort process that generated it. By the time Avril is ready to send the document out (about the end of March), I should have some replacement pages for her to incorporate.

I have not prepared an information note for the ballot, since this is your prerogative. However, it might include the following statement.

"This draft proposal for S1.1-1993 is a revision of S1.1-1960 (R1976), Acoustical Terminology. It differs from the draft circulated for comment in 1990 in the following ways:

The style of the document has been converted to be in accord with the current ANSI and ASACOS editorial guidelines.

The alphabetical structure of the 1990 draft has been converted to the numbered subject structure of S1.1-1960, where every term has an individual number, keyed to numbered subject sections. An alphabetical index of individual terms is provided, along with the number associated with each term.

A substantial number of terms not included in the 1990 draft are provided, including many in the S1.1-1960 version that had been omitted. Numerous errors have also been corrected. The entire section on "Recording and reproducing" that exists in S1.1-1960 has been omitted, as it was in the 1990 draft. This material is obsolete and is being superseded by activities in S1.4 under the auspices of the Audio Engineering Society. In the 1990 draft no material was provided covering "Sonics", a section included in S1.1-1960. A new section has been incorporated in this 1993 draft entitled "Sonics and ultrasonic testing", which includes terms

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originally contained in S1.1-1960 as well as a number of terms on ultrasonic testing provided by a Canadian group working on a parallel effort to produce a standard on acoustical terminology.

A number of the terms in the 1990 draft were based on their counterparts in the international standard on terminology IEV 50(801)-1984, Acoustic and electroacoustics. Every effort has been made in this 1993 draft to incorporate as much of the international wording as possible, including a large number of revisions of the IEC document that are now in press in Geneva. Where the international document refers to international standards, however, this 1993 draft for S1.1 incorporates current ANSI or other domestic standards instead, if they exist.

The 1990 draft received a large number of comments from its reviewers. These have been considered term by term in the preparation of the 1993 draft. Many of the reviewers comments are accounted for by using the current IEC definitions; others have been accepted wherever feasible.

.:

NOTE TO REVIEWERS OF PROPOSED DRAFT REVISION OF \$1.1-1960:

Between the time of submittal of the 5 March 1993 draft of the proposed revision of \$1.1-1960 (R1976) Acoustical Terminology to the S committee chairs and the Standards Secretariat several changes of an editorial nature and one change of technical substance have occurred. In an attempt to expedite the circulation of the draft, the secretariat immediately began its duplication and preparation for ballot upon receipt of the 5 March draft. Rather than expend the considerable time and money that would be required to reproduce the entire document over again in order to incorporate the recent changes, it was agreed with the Standards Secretariat that the one technical change would be provided as an addendum, along with this note of explanation. All editorial changes will, of course, be included with revisions of the document which will undoubtedly be required to accommodate comments received from the ballot and review by the S committees.

One of the major editorial changes has been a refinement of the alphabetical index included as Annex A. Reviewers are asked to look kindly at the current draft and to realize that it deserves a great deal of refinement, much of which has already been performed, but too late to include in the copy which you are being asked to review.

The one technical change which you are asked to consider is included with this memorandum. Namely, there were a few numerical errors in Table 13.1, "Interval comparisons in different mathematical tuning systems". A replacement page is attached.

Thank you for your indulgence.

William J. Galloway

Table 13.1

Interval comparisons in different mathematical tuning systems

	P	ythagor	ean	Equally	tempered		Just	
Name of interval	Origin	Ratio	Cents	Ratio	Cents	Origin	Ratio	Cents
Unison	1:1	1.000	0.00	1.000	0	1:1	1.000	0.00
Minor second	2 <sup>8</sup> :3 <sup>5</sup>	1.054	90.22	1.059	100	16:15	1.067	111.73
Lesser major second	1 3 <sup>2</sup> :2 <sup>3</sup>	1.125	203.91	1.122	200	10:9	1.111	182.40
Greater major secon	nd					9:8	1.125	203.91
Minor third	2 <sup>5</sup> :3 <sup>3</sup>	1.185	294.13	1.189	300	6:5	1.200	315.64
Major third	3 <sup>1</sup> :2 <sup>6</sup>	1.266	407.82	1.260	400	5:4	1.250	386.31
Perfect fourth	2 <sup>2</sup> :3	1.333	498.04	1.335	500	4:3	1.333	498.04
Augmented fourth	3 <sup>6</sup> :2 <sup>9</sup>	1.424	611.73	1.414	600	45:32	1.406	590.22
Diminished fifth	2 <sup>10</sup> : 3 <sup>6</sup>	1.405	588.27	1.414	600	64:45	1.422	609.78
Perfect fifth	3:2	1.500	701.96	1.498	700	3:2	1.500	701.96
Minor sixth	2 <sup>7</sup> :3 <sup>4</sup>	1.580	792.18	1.587	800	8:5	1.600	813.69
Major sixth	33:24	1.688	905.87	1.682	900	5:3	1.667	884.36
Minor seventh	2 <sup>4</sup> :3 <sup>2</sup>	1.778	996.0 <b>9</b>	1.782	1000	7:4	1.750	968.83
Harmonic minor seve	enth					16:9	1.778	996.09
Grave minor seventh	1					9:5	1.800	1017.60
Major seventh	3 <sup>5</sup> :2 <sup>7</sup>	1.898	1109.78	1.888	1100	15:8	1.87\$	1088.27
Octave	2:1	2.000	1200.00	2.000	1200	2:1	2.000	1200.00



# ACOUSTICAL · SOCIETY · OF · AMERICA

ATTACHMENT E-9 S12/278

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11 May 1993

COMMENTS RECEIVED FROM ACCREDITED STANDARDS COMMITTEE S2 in response to S2/249 circulated with the letter ballot sent to S1 (LB/S1.1/380) on the proposed revision of ANSI S1.1-1960 Acoustical Terminology - S1 ballot circulated on 26 March with a closing date of 7 May 1993

The comments received from Accredited Standards Committee S2, Mechanical Vibration and Shock, in response to S2/249 circulated with the letter ballot sent to S1 (LB/S1.1/380) on the proposed revision of ANSI S1.1-1960 Acoustical Terminology are enclosed herewith.

Response were received as follows:

IAME ORGANIZATION REPRESENTED

INDIVIDUAL EXPERT

No reponses were received



# ACOUSTICAL · SŒIETY · OF · AMERICA

ATTACHMENT E-10 S12/278

OFFICE OF THE STANDARDS SECRETARIAT

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11 May 1993

COMMENTS RECEIVED FROM ACCREDITED STANDARDS COMMITTEE S3 in response to S3/365 circulated with the letter ballot sent to S1 (LB/S1.1/380) on the proposed revision of ANSI S1.1-1960 Acoustical Terminology - S1 ballot circulated on 26 March with a closing date of 7 May 1993

The comments received from Accredited Standards Committee S3, Bioacoustics, in response to S3/365 circulated with the letter ballot sent to S1 (<u>LB/S1.1/380</u>) on the proposed revision of ANSI S1.1-1960 Acoustical Terminology are enclosed herewith.

Response were received as follows:

NAME

ORGANIZATION REPRESENTED

INDIVIDUAL EXPERT

Burkard, R.F.

American Speech-Language Hearing Association (ASHA)



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11 May 1993

COMMENTS RECEIVED FROM ACCREDITED STANDARDS COMMITTEE S12 in response to S12/268 circulated with the letter ballot sent to S1 (LB/S1.1/380) on the proposed revision of ANSI S1.1-1960 Acoustical Terminology - S1 ballot circulated on 26 March with a closing date of 7 May 1993

The comments received from Accredited Standards Committee S12, Noise, in response to S12/268 circulated with the letter ballot sent to S1 (<u>LB/S1.1/380</u>) on the proposed revision of ANSI S1.1-1960 Acoustical Terminology are enclosed herewith.

Response were received as follows:

NAME ORGANIZATION REPRESENTED INDIVIDUAL EXPERT

Berger, E.H. National Hearing Conservation

Association (S12 Alternate)



# ACOUSTICAL SOCIETY OF AMERICA S12/2

**ATTACHMENT E-12 S12/278** 

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11 May 1993

GENERAL COMMENTS RECEIVED
(OTHER THAN THOSE FROM STANDARDS
COMMITTEES S1, S2, S3 OR S12)

The general comments receives as a result of circulation of the S1 ballot on the <u>proposed</u> revision of the Acoustical Terminology standard (ansi s1.1-1960) - circulated on 26 March with a closing date of 7 May 1993 (LB/S1.1/380) are enclosed.

General comments were received as follows:

Name

Affiliation

Van Buren, A.L.

ASACOS representative;
TC on Underwater Acoustics

S12.10 REPORT MAY 1993

The second draft of the proposed standard on "Miniature Microphone-in-Real-Ear and Acoustic Test Fixture Methods for the Measurement of Insertion Loss of Hearing Protection Devices" was circulated to working group members in early May 1993. The second draft was modified to incorporate several good suggestions from the various working group members. An effort was made to use terminology that would be consistent with ISO and CEN standards in some areas in which our standards have not yet been established.

Two unresolved issues dealing with the measures of central tendency (used to calculate the mean and standard deviation) and with the number of subjects to be used for each evaluation will likely be decided on the basis of the consensus of the members. Although the current procedure may be statistically inaccurate it is the one called for by the EPA in labeling hearing protection devices. The situation is similar on the question of the number of subjects (it is proposed to increase the number to at least 15 with less than three repeat measurements per subject) for which the EPA regulation still requires ten subjects with three repeat measurements. The group must decide whether or not our proposed standard should be consistent with current EPA regulations.

Leif Nielson, TC 43 Secretariat, distributed for initial review a draft standard for the measurement of the performance of amplitude sensitive hearing protectors prepared by some members of ISO TC 43/SC 1/WG 17 on hearing protection. This draft is very preliminary and requires substantial work. It is planned to accomplish much of this work at a meeting of WG 17 to be held in Oslo during the May-June ISO meetings. CEN/TC 159 has prepared a draft standard on "Hearing protectors - safety requirements and testing - Part 4: Level-dependent earmuffs. TC 159 is not authorized to include testing methods in their standard and they plan to refer in their standard to the ISO WG 17 proposed standard on which work has just been initiated.

Elliott Berger (once again, the timing conflicts with my schedule) will represent ANSI at this meeting of WG 17 in Oslo. Elliott will provide feedback on the meeting and the proposed standard development upon his return to the US.

Charles W. Nixon Chair, WG S12.10

## **CABOT SAFETY CORPORATION** Research and Development **Hearing Protection Acoustics**

TO:

Avril Brenig

FROM:

Elliott H. Berger

DATE:

June 10, 1993

SUBJECT: Report on activities of S12/WG11 and ISO TC94/SC12

### S12/WG11

The working group met during the annual conference of the National Hearing Conservation Association (NHCA) in Albuquerque, NM, on February 18. We reviewed the status of our work effort. Presentations were made as follows:

E.	Berger	Overview and questions to be answered
J.	Royster	Statistical analysis of WG11 interlaboratory study
J.	Franks	Power analysis (re number of subjects required); Comparison of real-world data to WG11 interlaboratory results
D.	Ohlin	Analysis of the anatomical data collected in the

WG11 interlaboratory study

C. Dixon-Ernst Why users need accurate real-world estimates

Each item was discussed and plans completed for writing and research assignments that should be completed prior to the deadline date of this summer for submission of papers to be presented at the fall meeting of the Acoustical Society of America. The preparation of the lectures will also provide the basis for articles that will be submitted to JASA, and for subsequent work on developing a draft standard.

#### TC94/SC12

Although much activity is ongoing in Europe, and work is progressing rapidly in the CEN counterpart documents, no new documents have been received for U.S. voting. However, documents are expected in the next few months as SC12 will be meeting in late June in conjunction with CEN activities.

Elliott H./Berger

Chair S12/WG11; TAG Chair TC94/SC12

/ansirep8.s12

## **\$12/WG12** REPORT FOR THE SPRING 1993 ASA MEETING (OTTAWA)

- 1. I will attend both the Ottawa meeting and the S12 meeting there.
- 2. S12/WG12 has not met since the last report. S12/WG12 will next meet at ASA in fall 1993 and at NHCA in Spring 1994.
- 3. No change from the last report.

We are still awaiting for feedback from users of the draft Standard <u>\$12.13-1991</u>. We will revise the draft standard as needed if feedback comes in.

Several people have volunteered new potential control data bases. Once these are acquired and analyzed, their results hopefully will confirm the criterion ranges in the draft standard (or alternately will lead to revisions of the criterion ranges).

An ISO working group with goals similar to those of S12/WG12 has been organized (TC 43/WG5) with Larry Royster as convenor and Julia Royster as U.S. member. The first meeting will take place in Switzerland in July 1993.

Submitted by Julia D. Royster, Chair S12/WG12

address: 4706 Connell Drive

Raleigh, North Carolina 27612

## ACOUSTICAL SOCIETY OF AMERICA

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ATTACHMENT I-1 S12/278

1 February 1993

TO:

D.L. Johnson, Chair S12

RE:

Letter Ballot <u>LB/S12.9/Part 3/247</u> sent to Accredited Standards Committee S12 on 23 November 1992 and closed on 4 January 1993

SUBJECT:

Approval of proposed standard <u>ANSI S12.9/Part 3-199x</u>, Quantities and Procedures for Description and Measurement of Environmental Sound, <u>Part 3</u>: Short Term measurements with an observer present, draft dated October 1992.

Enclosed please find tally of the above letter ballot, showing results as follows:

## **CLASSIFICATION OF MEMBERS**

AFFIRMATIVE VOTES	15	P - PRODUCER	9
NEGATIVE VOTES	1	C - CONSUMER	6
ABSTENTION	3	G - GOVERNMENT	8
NOT RETURNED	11	GI - GENERAL INTEREST	7
TOTAL	30	TOTAL	30

## Continuation of results of letter ballot \$12.9/Part 3/247:

## **AFFIRMATIVE VOTES:**

Atack, R.M. Bohl, C.D.

Brownson, P.J.

U.S. Army Medical Corps.

American Industrial Hygiene

American College of Occupational

Callahan, R. Davis, L. Goodwin, R.

Johnson, D.L. Konheim, A. Michel, G.C.

Naunton, R.F. Page, J.

Pei, H.S.

Schomer, P.D.

Toothman, E.H.

Vendittis, D.

Medicine
Power Tool Institute, Inc.

Larson-Davis Laboratories
Acoustical Systems, Inc.
Acoustical Society of America

Bruel & Kjaer Instruments, Inc. American Otological Society U.S. Department of the Navy,

**BUREAU OF MEDICINE AND SURGERY** 

American Society of Heating and Refrigeration and Air-Conditioning

U.S. Department of Transportation

U.S. Dept. of the Army, Engineering

Research Lab. (USA-CERL)

Fastener Industry Noise Control Research Program

David Taylor Research Center

## **NEGATIVE VOTES:**

Burkard, R.F.

American Speech-Language-Hearing Association

#### **ABSTENTIONS:**

Addington, J.H.

Bovi, A.M.

Rawlings, D.

Compressed Air and Gas Institute (CAGI) Industrial Safety Equipment

strial Safety Equipmen
Association, Inc.

National Electrical Manufacturers

Association (NEMA)

## Continuation of results of letter ballot S12.9/Part 3/247:

### **NOT RETURNED:**

Chail, M.R. Audio Engineering Society
Erdreich, J. National Council of Acoustical

Consultants

Fox, J. Edison Electric Institute

Franks, J. National Hearing Conservation Association

Luttrell, L.F. Computer & Business Equipment

**Manufacturers Association** 

McKinley, R.L.

U.S. Department of the Air Force

Michael, L.A. American Academy of Otolaryngology Head

and Neck Surgery

Mozo, B.

U.S. Army Aeromedical Research Lab.

Price, G.R.

U.S. Army Human Engineering Lab.

Roth, S.I. ALCOA

Wang, S. Air-Conditioning and Refrigeration

Institute

## **LATE RESPONSE:**

Addington, J.H. Compressed Air and Gas Institute (CAGI)

Chail, M.R. Audio Engineering Society

Lutrell, L.F. Computer & Business Equipment

**Manufacturers Association** 

Peppin, R.J. Scantek, Inc.

## **INDIVIDUAL EXPERTS**

1) Individual Experts stating they will participate in the review of the document:

Benson, R.W. Marsh, A.H.

Winzer, R.W.

2) Individual Experts stating they will <u>not</u> participate in the review of the document:

None

## Continuation of results of letter ballot \$12.9/Part 3/247:

## **INDIVIDUAL EXPERTS (continued)**

3) Comments and/or recommendations were received from 4 Individual Experts, as follows:

Benson, R.W.

**General Comments** 

Beranek, L.

**Affirmative Comments** 

Marsh, A.H.

**Negative Comments** 

Winzer, G.

**General Comments** 

## Other:

1) Additional comments were received from the following:

Jennings, L.A.

**General Comments** 

(S12-NV members)

Campbell, R.H.

**Affirmative Comments** 

(Alternate)

Avril Brenig Standards Manager

cc: Standards Committee Vice Chair ASACOS Chair and Vice Chair



## ACOUSTICAL · SŒIETY · OF · AMERICA

ATTACHMENT I-5 S12/278

OFFICE OF THE STANDARDS SECRETARIAT

AVRIL BRENIG, Dr. P. H. STANDARDS MANAGER 335 EAST 45TH STREET, NEW YORK, NEW YORK 10017-3483

Telephone (212) 661-9404 Telex 960983 AMINSTPHYS NYK Telefax (212) 949-0473

#### **IMMEDIATE RETURN REQUESTED**

LB/S12.9/Part 3/247 23 November 1992

Return to:

Letter Ballot Department

Due date:

4 January 1993

## LETTER BALLOT ACCREDITED STANDARDS COMMITTEE ON NOISE, S12

Topic: Approval of proposed standard ANSI S12.9/Part 3-199X; Quantities and Procedures for Description and Measurement of Environmental Sound, Part 3: Short-term measurements with an observer present, draft dated October 1992

Authorized by:

D.L. Johnson, Chair S

Brenig, ASA Standards Manager

Reference Document(s):

DOC./ATTACHMENT A LB/S12.9/Part 3/247

Quantities and Procedures for Description and Measurement of Environmental Sound, Part 3: Short-term

measurements with and observer present, draft dated

October 1992

ATTACHMENT B

Letter from D.L. Johnson, Chair S12, to A. Brenig.

dated 26 October 1992

## Background Information:

Working group S12/WG15 Measurement and Evaluation of Outdoor Community Noise, under the chairmanship of P.D. Schomer, assisted Accredited Standards Committee S12, Noise, in the preparation of this first draft of ANSI S12.9/Part 3-199X. The working group membership is listed in the subject document.

Both the Chair of \$12, D.L. Johnson, and the chair of the preparatory working group, S12/WG15, P.D. Schomer, recommend approval of the October 1992 draft of ANSI \$12.9/Part 3-199X, as a proposed American National Standard.

## ACOUSTICAL SOCIETY OF AMERICA

OFFICE OF THE STANDARDS SECRETARIAT

AVRIL BRENIG DH. P.H. STANDARDS MANAGER



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 (212) 661-9404

 Teletax
 (212) 949-0473

 Telex
 960983 AMINSTPHYS NYK

ATTACHMENT J-1 S12/278 14 April 1993

TO: D.L. Johnson, Chair S12

Re: Letter Ballot LB/S12.19/256 sent to the Accredited Standards

Committee S12 on 29 January 1993 closed on 12 March

1993 -

SUBJECT: Approval of proposed standard ANSI S12.19-199X,

Measurement of Occupational Noise Exposure, draft dated

October 1992

Enclosed please find tally of the above letter ballot, showing results as follows:

## **CLASSIFICATION OF MEMBERS**

AFFIRMATIVE VOTES	21	P - PRODUCER	8
NEGATIVE VOTES	4	C - CONSUMER	8
ABSTENTIONS	0	G - GOVERNMENT	7
NOT RETURNED	5	GI - GENERAL INTEREST	7
TOTAL	30	TOTAL	30

## Continuation of results of letter ballot S12.19/256:

## **AFFIRMATIVE VOTES:**

Anderson, R. Atack, R.M. Bohl, C.D.

Bovi, A.M.

Brownson, P.J.

Burkard, R.F.

Callahan, R. Erdreich, J.

Marshall, L. (Alternate)

McKinley, R.L. Michael, L.A. (Alternate)

Michel, G.C. Monk, W. Naunton, R.F. Pei, H.S.

Rawlings, D.

Roth, S.I. Seitz, R. Alternate

Toothman, E.H.

Vendittis, D. Wang, S.

Larson-Davis Laboratories U.S. Army Medical Corps. American Industrial Hygiene

**Association** 

Industrial Safety Equipment

Association, Inc.

American College of Occupational

Medicine

American Speech-Language-Hearing

**Association** 

Power Tool Institute, Inc.
National Council of Acoustical

Consultants

U.S. Dept. of the Navy,

**BUREAU OF MEDICINE AND SURGERY** 

U.S. Department of the Air Force

American Academy of Otolaryngology

Head and Neck Surgery Bruel & Kjaer Instruments, Inc.

CAOHC

American Otological Society
American Society of Heating
Refrigeration and Air-Conditioning

**National Electrical Manufacturers** 

Association (NEMA)

ALCOA

Acoustical Systems, Inc.

Fastener Industry Noise Control

Research Program

Naval Surface Warfare Center

Air-Conditioning and Refrigeration

Institute

## **NEGATIVE VOTES:**

Franks, J. Johnson, D.L. Konheim, A. Schomer, P.D. National Hearing Conservation Association Acoustical Society of America U.S. Department of Transportation U.S. Department of the Army,

**Environmental Office** 

Continuation o	f results	of letter	ballot	S12.	19/256:
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**ABSTENTIONS:** 

NONE

## **NOT RETURNED:**

Addington, J.H.

Chial, M.R.

Lotz, R.

Mozo, B. Price, G.R. Compressed Air and Gas Institute

**Audio Engineering Society** 

Computer & Business Equipment

Manufacturers Association

U.S. Army Aeromedical Research Lab.
U.S. Army Human Engineering Laboratory

## **LATE RESPONSE:**

Franks, J.

Konheim, A. McKinley, R.L.

Michael, L.A. (Alternate)

Neck

**National Hearing Conservation Association** 

**U.S. Department of Transportation** 

U.S. Department of the Air Force

American Academy of Otolaryngology Head and

Head and Neck Surgery

#### **INDIVIDUAL EXPERTS:**

1) Individual Experts stating they will participate in the review of the document:

NONE

## Continuation of results of letter ballot \$12.19/256:

## **INDIVIDUAL EXPERTS (continued):**

2) Individual Experts stating they will not participate in the review of the document:

Baade, P.K.

3) Comments and/or recommendations were received from 1 Individual Expert(s); as follows:

Benson, R.W.

**Negative Comments** 

Avril Brenig Standards Manager

cc: Vice Chair, Standards Committee Chair and Vice Chair, ASACOS Chair, Working Group



## ACOUSTICAL · SOCIETY · OF · AMERICA

ATTACHMENT J-5 S12/278

OFFICE OF THE STANDARDS SECRETARIAT

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Telex 960983 AMINSTPHYS NYK
Telefax (212) 949-0473

IMMEDIATE RETURN REQUESTEDS12.19/256
29 January 1993

Return to:

Letter Ballot Department

Due date:

12 March 1993

# LETTER BALLOT ACCREDITED STANDARDS COMMITTEE ON NOISE, S12

Topic: Approval of proposed standard ANSI S12.19-199X, Measurement of Occupational

Noise Exposure, draft dated October 1992

Authorized by:

D.L. Johnson, Chair S12

Distributed by:

A. Brenig, ASA Standards Manager

Reference Document(s):

**DOC./ATTACHMENT A** 

LB/S12.19/256

Measurement of Occupational Noise Exposure, draft

dated October 1992

ATTACHMENT B

Letter from D.L. Johnson, Chair S12, to A. Brenig,

dated 30 November 1992

## Background Information:

Working group S12/WG19, Measurement of Occupational Noise Exposure under cochairmanship of J. Barry and R. Goodwin assisted Accredited Standards Committee S12, Noise, in the preparation of this draft of ANSI S12.19-199X. The working group membership is listed in the subject document.

Both the Chair of S12, D.L. Johnson, and the co-chairs of the preparatory working group, S12/WG19, J. Barry and R. Goodwin, recommend approval of the October 1992 draft of ANSI S12.19-199X, as a proposed American National Standard.

## ACOUSTICAL SOCIETY OF AMERICA

OFFICE OF THE STANDARDS SECRETARIAT

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Telephone (212) 661-9404 Telefax (212) 949-0473

(212) 949-0473 960983 AMINSTPHYS NYK

> ATTACHMENT K-1 S12/278 25 February 1993

TO: D.L. Johnson, Chair S12

Re:

Letter Ballot LB/S12.19/256 sent to the Accredited

Standards Committee S12 on 21 December 1992 closed on

1 February 1993

SUBJECT:

Approval of proposed standard ANSI S12.18-199X, Outdoor Measurement of

Sound, Pressure Level, draft dated November 1992

Enclosed please find tally of the above letter ballot, showing results as follows:

## **CLASSIF!CATION OF MEMBERS**

AFFIRMATIVE VOTES	15	P - PRODUCER	10
NEGATIVE VOTES	3	C - CONSUMER	8
ABSTENTIONS	3	G - GOVERNMENT	7
NOT RETURNED	10	GI - GENERAL INTEREST	6
TOTAL	31	TOTAL	31

### Continuation of results of letter ballot \$12.18/251:

### **AFFIRMATIVE VOTES:**

Anderson, R. Atack, R.M. Bohl, C.D.

Larson-Davis Laboratories
U.S. Army Medical Corps.
American Industrial Hygiene
Association

Bovi, A.M.

Industrial Safety Equipment Association, Inc.

Burkard, R.F.

American Speech-Language-Hearing

Association

Franks, J. Goodwin, R. Johnson, D.L. Marshall, L. National Hearing Conservation Association Acoustical Systems, Inc.

Acoustical Society of America U.S. Dept. of the Navy.

Alternate

BUREAU OF MEDICINE AND SURGERY

Monk, W.

CAOHC

Naunton, R.F.

American Otological Society
American Society of Heating and

Pei, H.S.

Rawlings, D.

Refrigeration and Air-Conditioning National Electrical Manufacturers

Association (NEMA)

Roth, S.I.

ALCOA

Wang, S.

Air-Conditioning and Refrigeration

Institute

## **NEGATIVE VOTES:**

Erdreich, J.

**National Council of Acoustical** 

Consultants

Michel, G.C. Schomer, P.D. Bruel & Kjaer Instruments, Inc. U.S. Department of the Army.

**Environmental Office** 

#### **ABSTENTIONS:**

Callahan, R. Toothman, E.H. Power Tool Institute, Inc.

**Fastener Industry Noise Control** 

Research Program

Vendittis, D.

**Naval Surface Warfare Center** 

## Continuation of results of letter ballot \$12.18/251:

## **NOT RETURNED:**

Addington, J.H. Brownson, P.J.

Compressed Air and Gas Institute American College of Occupational Medicine

Chial, M.R. Fox, J. Konheim, A. Luttrell, L.F.

Audio Engineering Society Edison Electric Institute

U.S. De

U.S. Department of Transportation Computer & Business Equipment Manufacturers Association

McKinley, R.L. Michael, L.A. U.S. Department of the Air Force
American Academy of Otolaryngology
Head and Neck Surgery

U.S. Army Aeromedical Research Lab.
U.S. Army Human Engineering Laboratory

Mozo, B. Price, G.R.

### **LATE RESPONSE:**

Anderson, R. Erdreich, J.

Larson-Davis Laboratories
National Council of Acoustical

Consultants

Franks, J. Goodwin, R. National Hearing Conservation Association

Goodwin, R. Acoustical Systems, Inc. Monk, W. CAOHC

Rawlings, D.

National Electrical Manufacturers
Association (NEMA)

## **INDIVIDUAL EXPERTS:**

1) Individual Experts stating they will participate in the review of the document:

Baade, P.K. Gales, R.S. Marsh, A.H. Royster, L.H.

## Continuation of results of letter ballot \$12.18/251:

## **INDIVIDUAL EXPERTS (continued):**

2) Individual Experts stating they will not participate in the review of the document:

**NONE** 

3) Comments and/or recommendations were received from 4 Individual Experts, as follows:

Baade, P.K.

Gales, R.S.

Marsh, A.H.

Royster, L.H.

Negative Comments

Negative Comments

Negative Comments

Avril Brenig Standards Manager

cc: Vice Chair, Standards Committee Chair and Vice Chair, ASACOS Chair, Working Group



## ACOUSTICAL SOCIETY OF AMERICA

ATTACHMENT K-5 S12/278

OFFICE OF THE STANDARDS SECRETARIAT

AVRIL BRENIG, DIE P. H. SYANDARDS MANAGER 335 EAST 45TH STREET, NEW YORK, NEW YORK 10017-3483

Telephone (212) 661-9404 Telex 960983 AMINSTPHYS NYK Telefax (212) 949-0473

## IMMEDIATE RETURN REQUESTED

LB/S12.18/251 21 December 1992

Return to:

Letter Ballot Department

Due date:

1 February 1993

# LETTER BALLOT ACCREDITED STANDARDS COMMITTEE ON NOISE, S12

Topic: Approval of proposed standard ANSI S12.18-199X, Outdoor Measurement of Sound

Pressure Level, draft dated November 1992

Authorized by:

D.L. Johnson, Chair S124

Distributed by:

Brenig, ASA Standards Manager

Reference Document(s

DOC./ATTACHMENT A

Proposed standard ANSI S12.18-199X

<u>LB/S12.18/251</u> Outdoor Measurement of Sound Pressure Level,

draft dated November 1992

ATTACHMENT B

Letter from D.L. Johnson, Chair S12, to A. Brenig,

dated 26 October 1992

## Background Information:

Working group \$12/WG27 Outdoor Measurement of Sound Pressure Level, under the chairmanship of G. Daigle, assisted Accredited Standards Committee \$12, Noise, in the preparation of this draft of ANSI \$12.18-199X. The working group membership is listed in the subject document.

Both the Chair of S12, D.L. Johnson, and the chair of the preparatory working group, S12/WG27, G. Daigle, recommend approval of the November 1992 draft of ANSI S12.18-199X, as a proposed American National Standard.

## COMPRESSED AIR AND GAS INSTITUTE



1 3 0 0 S U M N E R A V E. CLEVELAND, OHIO 44115-2651 218/241-7333 TELEX 980-393 FAX 218-241-0105

January 29, 1993

**FACSIMILE** 

Dr. Avril Brenig Standards Manager Acoustical Society of America 335 East 45th Street New York, NY 10017-3483

Dear Dr. Brenig:

Pursuant to your telephone conversation with our office, the Engineering Committee of the Pneumatic Tool Section of Compressed Air and Gas Institute is currently working on a revision for a noise standard for tools. This is to confirm that the revised noise standard, American National Standard for Acoustics - Air Tools and Small Air-driven Machines-Measurement of Sound Emitted has been assigned the designation of S12.41.

We anticipate that the revised standard will be submitted to ANSI by early summer for consideration as an American National Standard.

Thank you for your assistance in this matter.

Very truly yours,

Sidn. H. U

OHN H. ADDINGTON

JHA:ls cagi

cc: Mr. Duane Bookshar

Mr. David Rosbrook

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## ACOUSTICAL SOCIETY OF AMERICA

OFFICE OF THE STANDARDS SECRETARIAT

AVRIL BRENIG, D+ PH STANDARDS MANAGER



335 EAST 45TH STREET NEW YORK, NEW YORK 10017 3483

Telephone (212) 661-9404 Telefax (212) 949-0473

960983 AMINSTPHYS NYK Telex

> **ATTACHMENT M-1** S12/278

ISO/TC 43 ACOUSTICS and ISO/TC 43/SC1 NOISE

U.S. TAG Chair: H.E. von Gierke U.S. TAG Vice Chair: P.D. Schomer

Documents processed by the ASA Standards Secretariat from October through April 1993

The following documents were received for VOTE AND/OR COMMENT by the U.S. Member Body:

TAG	DRAFT INTERNATIONAL STANDARDS (DIS)
S12	ISO/DIS 5135: Acoustics - Determination of sound power levels of noise from air terminal units, dampers and valves by measurement in a reverberation room.
_	992. The U.S. position, <u>AFFIRMATIVE</u> on 8 December 1992, and from ANSI to ISO
S1/S3/S12	ISO/DIS 5131: Acoustics - Tractors and machinery for agriculture and forestry -
	S12 46) on 15 October 19 as submitted to ANSI o

announced to S1, S3, and S12 (S1/379). The U.S. position, AFFIRMATIVE WITH COMMENTS, was sent to ANSI on 12 April 1993, and from ANSI to ISO on 20 April 1993.

Technical Coordinator	TAG	DRAFT INTERNATIONAL STANDARDS (DIS)
R.M. Guernsey	<b>S12</b>	ISO/DIS 11546-1: Acoustics - Determination of sound insulation performances of enclosures Part 1: Measurements in small enclosures under laboratory conditions
		ISO/DIS 11546-2: Acoustics - Determination of sound insulation performances of enclosures Part 2: Measurements of in situ sound insulation performance of enclosures (for acceptance/verification purposes)
announced to S12 (S12/WITH COMMENTS w		y 1993. The U.S. position, <u>AFFIRMATIVE</u> ISI on 7 May 1993.
B.M. Brooks	S12	ISO/DIS 11690-1: Acoustics - Recommended practice for the design of low-noise workplaces Part 1: Noise control strategies.
		ISO/DIS 11690-2: Acoustics - Recommended practice for the design of low-noise workplaces Part 2: Noise control measures.
		y 1993. The U.S. position, <u>AFFIRMATIVE</u> ISI on 5 May 1993, and from ANSI to ISO on 6
P.K. Baade	S12	ISO/DIS 3746: Acoustics - Determination of sound power levels of noise sources. Survey method employing and enveloping measurement surface over a reflecting plane.

announced to S12 (S12/264) on 17 February 1993. The U.S. position, <u>AFFIRMATIVE WITH COMMENTS</u>, was submitted to ANSI on 10 May 1993.

Technical Coordinator	TAG	DRAFT INTERNATIONAL STANDARD (DIS)
R. Lotz	S12	ISO/DIS 10302: Acoustics - Measurement for the measurement of airborne noise emitted by small airmoving devices.
announced to S12 ( <u>S12/27</u>	70) on 27 April 19	93.
A. Konheim	S12	ISO/DIS 3095: Acoustics - Measurement of noise emitted by railbound vehicles.
		93. The U.S. position, AFFIRMATIVE WITH 1993, and from ANSI to ISO on 21 June 1993
R.F. Schumacher	S12	ISO/DIS 6798: Acoustics - Test code for the measurement of airborne noise emitted by reciprocating internal combustion engines. Engineering method and survey method.
announced to S12 ( <u>S12/27</u>	71) on 27 April 19	93.
S.I. Roth	S12	ISO/DIS 11200: Acoustics - Noise emitted by machinery and equipment. Guidelines for the use of basic standards for the determination of emission sound pressure levels at the work station and at other specified positions.
ะกnounced to S12 ( <u>S12/27</u>	7 <u>2</u> ) on 30 April 19	93.
S.I. Roth	S12	ISO/DIS 11201: Acoustics - Noise emitted by machinery and equipment. Measurement of emission sound pressure levels at the work station and at other specified positions. Engineering method in an essentially free field over a reflecting plane.
announced to S12 ( <u>S12/27</u>	<u>73</u> ) on 30 April 19:	<u> </u>

Technical Coordinator	TAG	DRAFT INTERNATIONAL STANDARDS (DIS)
S.I. Roth	S12	ISO/DIS 10203: Acoustics - Noise emitted by machinery and equipment. Determination of emission sound pressure levels at the work station and at other specified positions.
announced to S12 (S12/2	75) on 30 April 1993.	
S.I. Roth	S12	ISO/DIS 11202: Acoustics - Noise emitted by machinery and equipment. Measurement of emission sound pressure levels at the work station and at other specified positions. Survey method in situ.
announced to S12 (S12/2	74) on 30 April 1993.	
S.I. Roth	S12	ISO/DIS 11204: Acoustics - Noise emitted by machinery and equipment. Measurement of emission sound pressure levels at the work station and at other specified positions. Method requiring environmental corrections.
announced to S12 (S12/2	76) on 30 April 1993.	
S.I. Roth	S12	ISO/DIS 12001: Acoustics - Noise emitted by machinery and equipment. Rules for the drafting and presentation of a noise test code.
announced to S12 (S12/2	<u>77</u> ) on 30 April 1993.	

Technical Coordinator	TAG	DRAFT INTERNATIONAL STANDARDS (DIS)
R.M. Guernsey	S12	ISO/DIS 11691: Acoustics - Measurements of insertion loss of ducted silencers without flow. Laboratory survey method.

announced to S12 (S12/266) on 16 March 1993.

Technical Coordinator	TAG	COMMITTEE DRAFTS (CD)
M.J. Crocker	S12	ISO/CD 9614-2: Acoustics - Determination of sound power levels of noise sources using sound intensity. Part 2: Measurement by scanning.

announced to S12 (S12/255) on 30 December 1992. The U.S. position, NEGATIVE WITH COMMENTS, was submitted to ANSI on 9 February 1993, and from ANSI to ISO on 11 February 1993.

P.D. Schomer S12 <u>ISO/CD 11820</u>: Acoustics - Testing of silencers in situ.

announced to S12 (S12/257) on 30 December 1992. The U.S. position, <u>AFFIRMATIVE</u> WITH COMMENTS, was submitted to ANSI on 9 February 1993, and from ANSI to ISO on 11 February 1993.

P.D. Schomer S12 <u>SECOND ISO/CD 10843</u>: Acoustics - Methods for the measurement of single bursts of noise.

announced to S12 (S12/260) on 22 January 1993. The U.S. position, <u>AFFIRMATIVE</u> <u>WITHOUT COMMENTS</u>, was submitted to ANSI on 24 February 1993, and from ANSI to ISO on 17 March 1993.

Technical Coordinator	TAG	COMMITTEE DRAFTS (CD)
S.I. Roth	S12	SECOND ISO/CD 11821: Acoustics - Measurement of the in situ sound attenuation of a removable screen.
	<del></del>	1993. The U.S. position, <u>NEGATIVE WITH</u> March 1993, and from ANSI to ISO on 5 March
B.M. Brooks	S12	FIRST ISO/CD 11690-3: Recommended practive for the design of low-noise workplaces. Part 3: Sound propagation and noise prediction in workshops.
	<del></del>	1993. The U.S. position, <u>AFFIRMATIVE</u> SI on 2 March 1993, and from ANSI to ISO on
P.D. Schomer	S12	SECOND ISO/CD 11688-1: Acoustics - Recommended practive for the design of low-noise machinery and equipment. Part 1: Planning.
		SECOND ISO/CD 11688-2: Acoustics - Recommended practice for the design of low-noise machinery and equipment. Part 2: Noise generation principles.
		1993. The U.S. position, <u>AFFIRMATIVE</u> SI on 2 March 1993, and from ANSI to ISO on
L.A. Wilber	S3	SECOND ISO/CD 226-1: Acoustics - Equal Loudness level contour for otologically normal listeners. Part 1: Reference threshold of hearing under free-field and diffuse-field listening

announced to S3 (<u>S3/361</u>) on 26 February 1993. The U.S. position, <u>AFFIRMATIVE WITH</u> <u>COMMENTS</u>, was submitted to ANSI on 8 March 1993, and from ANSI to ISO on 21 April 1993.

conditions.

# **DOCUMENTS CIRCULATED AD-HOC**

DOCUMENT

TITLE

COORDINATOR(S)

COMMITTEE

ISO/CD 10847

Acoustics - Determination of insertion loss of

W. Bowlby

**S12** 

outdoor noise barriers of all types

G. Fleming

sent to G. Fleming on an ad-hoc basis (<u>S12 Ad-Hoc 1</u>) on 8 February 1993. The U.S. position, <u>ABSTENTION WITH COMMENTS</u>, was submitted to ANSI on 6 April 1993, and from ANSI to ISO on 19 April 1993.

#### **OTHER ACTIONS:**

# ISO/TC 43/SC1 Noise-Representation from the United States.

# (1) ISO/TC 43/WG5 - Hearing Conservation Programs

U.S. Convener:

L.H. Royster

North Carolina State University

Department of Mechanical and Aerospace Engineering

P.O. Box 7910

Raleigh, North Carolina 27695-7910

Tel: (919) 782-1624 Fax: (919) 781-2396

U.S. Member:

J.D. Royster

P.O. Box 30698

Raleigh, North Carolina 27622-0698

Tel: (919) 782-1624

# (2) <u>ISO/TC 43/SC1/WG36</u> - Methods for the Determination of acoustical performance of noise attenuation devices:

U.S. Member(s):

D.B. Nelson

Sandia Laboratory Division 8413 Livermore, California 94550 Direct Tel: (415) 455-2091

General Tel: (415) 455-7011 ext. 2091

R.M. Guernsey

**Director** 

R.M. Guernsey and Associates

P.O. Box 1517

20 Northbridge Place

Morristown, New Jersey 07960-1517

Tel: (201) 267-7037

Douglas D. Reynolds, Alternate

3939 Briar Crest Court Las Vegas, Nevada 89120

Tel: (702) 458-1681

# OTHER ACTIONS (continued)

# (3) <u>ISO/TC 43/SC1/WG41</u> - Sirens

U.S. Member: Richard Morrow

Whelan Engineering

Route 145 Winthrop Road

Chester, Connecticut 06412

Tel: (203) 526-9504 Fax: (203) 526-4078

Alternate: P.D. Graham

Manager of Research & Development Signal Division Federal Signal Corporation

2615 Federal Signal Drive University Park, Illinois 60466

Tel: (708) 534-4739

# ATTACHMENT N S12/278

# TC 43 and TC 43/SC1

We are well prepared for the upcoming meeting in Oslo (31 May to 4 June); we have the largest U.S. delegation in recent memory. We have processed or are processing about 25 ISO documents in the last 6 months - an almost unbelievable rate. The new subgroups to S12 are beginning to help in the process.

More help is still needed - especially in the area of work-place noise and quiet factories. Steve Roth and Bennett Brooks are doing a great job with documents (they, and especially Steve) have taken about 1/2 of the ISO load; but I am sure they would appreciate additional help.

In all of the areas, the more comments we get on ISO documents, the better we can make our U.S. input.

We are always looking for additional people who can actively participate in working groups and travel frequently to Europe.

P.D. Schomer
Vice Chair
U.S. TAG for ISO/TC 43 and ISO/TC 43/SC1

OFFICE OF THE STANDARDS SECRETARIAT

AVRIL BRENIG, DH P H STANDARDS MANAGER



335 EAST 45TH STREET NEW YORK, NEW YORK 10017-3483

Telephone (212) 661-9404 Teletax (212) 949-0473

(212) 949-0473 960983 AMINSTPHYS NYK

> ATTACHMENT 0-1 S12/278 12 April 1993

TO:

D.L. Johnson, Chair S12

RE:

Letter Ballot LB/S12/250 sent to Accredited

Standards Committee S12 on 18 December 1992 and

closed on 29 January 1993

SUBJECT:

Approval of Officers and Individual Experts, and U.S.

TAG Chairs for 1993/1994

Enclosed please find tally of the above letter ballot, showing results as follows:

# **CLASSIFICATION OF MEMBERS**

AFFIRMATIVE VOTES	27	P - PRODUCER	10
NEGATIVE VOTES	0	C - CONSUMER	6
ABSTENTIONS	0	G - GOVERNMENT	8
NOT RETURNED	3	GI - GENERAL INTEREST	6
TOTAL	30	TOTAL	30

# Continuation of results of letter ballot \$12/250;

### **AFFIRMATIVE VOTES:**

Addington, J.H. Anderson, R. Atack, R.M. Bohl, C.D. Bovi, A.M.

Brownson, P.J.

Burkard, R.F.

Callahan R. Erdreich, J.

Franks, J. Goodwin, R. Johnson, D.L. Konheim, A.U.S. Luttrell, L.F.

Page, J.

McKinley, R.L. Michel, G.C. Monk, W. Naunton, R.F. Pei, H.S.

Price, G.R. Rawlings, D. Roth, S.I. Schomer, P.D.

Toothman, E.H.

Vendittis, D. Wang, S. Compressed Air and Gas Institute

Larson-Davis Laboratories
U.S. Army Medical Corps.
American Industrial Hygiene
Industrial Safety Equipment
Association, Inc.

American College of Occupational

Medicine

American Speech-Language-Hearing

**Association** 

Power Tool Institute, Inc.
National Council of Acoustical

Consultants

**National Hearing Conservation Association** 

Acoustical Systems, Inc.
Acoustical Society of America
Department of Transportation
Computer & Business Equipment
Manufacturers Association

U.S. Department of the Navy,

**BUREAU OF MEDICINE AND SURGERY** 

U.S. Department of the Air Force Bruel & Kjaer Instruments, Inc.

CAOHC

American Otological Society
American Society of Heating and

Refrigeration and Air-Conditioning

U.S. Army Human Engineering Lab. National Electrical Manufacturers Assoc. ALCOA

U.S. Dept. of the Army, Engineering

Research Lab.

**Fastener Industry Noise Control** 

Research Program

David Taylor Research Center Air-Conditioning and Refrigeration

Institute

# Continuation of results of letter ballot \$12/250;

**NEGATIVE VOTES:** 

None

**ABSTENTIONS:** 

None

**NOT RETURNED:** 

Chial, M.R. Audio Engineering Society, Inc.

Michael, L.A. American Academy of Otolaryngology

Head and Neck Surgery

Mozo, B. U.S. Army Aeromedical Research Lab.

**LATE RESPONSE:** 

Anderson, R. Larson-Davis Laboratories

Franks, J. National Hearing Conservation Association

Avril Brenig Standards Manager

cc: Standards Committee Vice Chair ASACOS Chair and Vice Chair

# S12 ACCREDITED STANDARDS COMMITTEE ON NOISE S12 APPOINTMENTS

POSITION	INDIVIDUAL	TERM
Chairman	D.L. Johnson	1993-1996
Vice Chairman	P.D. Schomer	1992-1995
ASA Representative	5.L. Johnson	1993-1994
Alt. ASA Representative	W.J. Galloway	1993-1994
INDIVIDUAL EXPERTS:	P.K. Baade	1993-1994
	R.G. Bartheld	1993-1994
	R.W. Benson	1993-1994
	Beranek	1993-1994
	E.H. Berger	1993-1994
	K.M. Eldred	1993-1994
	R.S. Gales	1993-1994
	W.J. Galloway	1993-1994
	R.M. Guernsey	1993-1994
	R.K. Hillquist	1993-1994
	D.L. Johnson	1993-1994
	W.W. Lang	1993-1994
	G.C. Maling, Jr.	1993-1994
	A.H. Marsh	1993-1994
	L.H. Royster	1993-1994
	P.D. Schomer	1993-1994
	D.E. Wasserman	1993-1994
	W.R. Thorton	1993-1994
	H.E. von Gierke	1993-1994
	L.A. Wilber	1993-1994

# S12 ACCREDITED STANDARDS COMMITTEE ON NOISE S12 APPOINTMENTS

POSITION	INDIVIDUAL	TERM
INDIVIDUAL EXPERTS (CONTINUED)	G.E. Winzer	1993-1994
<u> </u>	G.S.K. Wong	1993-1994
	R.W. Young	1993-1994
U.S. TAG Chairs:		
ISO/TC 43/SC1	H.E. von Gierke	1993-1994
ISO/TC 43/SC1 (Vice Chair)	P.D. Schomer	1993-1994
ISO/TC 94/SC12	E.H. Berger	1993-1994

OFFICE OF THE STANDARDS SECRETARIAT

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ATTACHMENT P-1 S12/278 15 April 1993

TO:

D.L. Johnson, Chair S12

RE:

Letter Ballot LB/S12/258 sent to Accredited

Standards Committee S12 on 29 January 1993 and

closed on 12 March 1993

**SUBJECT:** 

Approval of proposal for new work item on Evaluation of Communication

Ability in Noise for individuals wearing Hearing protection

Enclosed please find tally of the above letter ballot, showing results as follows:

### **CLASSIFICATION OF MEMBERS**

AFFIRMATIVE VOTES	20	P - PRODUCER	9
NEGATIVE VOTES	o	C - CONSUMER	6
ABSTENTIONS	o	G - GOVERNMENT	8
NOT RETURNED	10	GI - GENERAL INTEREST	7
TOTAL	30	TOTAL	30

# Continuation of results of letter ballot \$12/258:

## **AFFIRMATIVE VOTES:**

Anderson, R. **Larson-Davis Laboratories** Atack, R.M. U.S. Army Medical Corps. Bohl, C.D. American Industrial Hygiene Bovi, A.M. **Industrial Safety Equipment** 

Association, Inc.

Burkard, R.F. American Speech-Language-Hearing

**Association** 

Callahan R. Power Tool Institute, Inc.

Franks, J. **National Hearing Conservation Association** 

Goodwin, R. Acoustical Systems, Inc. Johnson, D.L. **Acoustical Society of America** U.S. Department of the Air Force McKinley, R.L. Michel, G.C. Bruel & Kjaer Instruments, Inc.

Monk, W. CAOHC

Naunton, R.F. **American Otological Society** Pei, H.S. American Society of Heating and

Refrigeration and Air-Conditioning

National Electrical Manufacturers Assoc. Rawlings, D.

Roth, S.I. **ALCOA** 

Schomer, P.D. U.S. Dept. of the Army, Engineering

Research Lab.

**Fastener Industry Noise Control** Toothman, E.H.

Research Program

Vendittis, D. **Naval Surface Warfare Center** Wang, S. Air-Conditioning and Refrigeration

Institute

**NEGATIVE VOTES:** 

NONE

**ABSTENTIONS:** 

NONE

# Continuation of results of letter ballot \$12/258:

# **NOT RETURNED:**

Addington, J.H. Brownson, P.J.

Compressed Air and Gas Institute American College of Occupational

Medicine

Chial, M.R. Erdreich, J. Audio Engineering Society, Inc. National Council of Acoustical

Consultants

Konheim, A. Lotz, R.

U.S. Department of Transportation Computer & Business Equipment Manufacturers Association

Michael, L.A.

American Academy of Otolaryngology

Head and Neck Surgery

Mozo, B.

U.S. Army Aeromedical Research Lab.

U.S. Department of the Navy,

Page, J.

**BUREAU OF MEDICINE AND SURGERY** 

Price, G.R.

U.S. Army Human Engineering Lab.

## LATE RESPONSE:

Vendittis, D.

**Naval Surface Warfare Center** 

Avril Brenig Standards Manager

cc: Standards Committee Vice Chair ASACOS Chair and Vice Chair



OFFICE OF THE STANDARDS SECRETARIAT

AVRIL BRENIG, Dr. P. H STANDARDS MANAGER 335 EAST 45TH STREET, NEW YORK, NEW YORK 10017-3483

Telephone (212) 861-8404 Telex 960983 AMINSTPHYS NYK Telefax (212) 848-0473

### **IMMEDIATE RETURN REQUESTED**

LB/S12/258 29 January 1993

Return to: Due date: Letter Ballot Department

12 March 1993

ADMINISTRATIVE LETTER BALLOT ACCREDITED STANDARDS COMMITTEE ON NOISE, S12

Topic: Approval of proposal for new wok item on Evaluation of Communication Ability in

Noise for Individuals wearing Hearing Protection

Approved for circulation by:

Accredited Standards Committee S12 meeting held on 3

ကြွှဲem ရှိချုံ 1992 (၁) 2/248)

Distributed by

ASA Standards Manager

Reference Documents

ATTACHMENT A

Letter from D.L. Johnson dated 30 November 1992

ATTACHMENT B

Letter from E.H. Toothman dated 5 November 1992

ATTACHMENT C

Letter from K. Michael dated 17 November 1992

### Background Information:

At the meeting of S12 held on 3 November 1992 in New Orleans, La. (S12/248), Mr. E. Toothman, presented a proposal for a new work item on <u>Evaluation of Communication Ability in Noise for Individuals wearing Hearing Protection</u>. The scope of the proposed new work item is given in <u>ATTACHMENT C</u>.

The Chair of S12, D.L. Johnson, and the chair of the proposed new working group, Mr.K. Michael, both recommend the approval of the new work item by S12. If approved, the work item will be assigned to new working group <u>S12/WG35</u>.



2450 ALAMO AVENUE, S.E., P.O. BOX 9100, ALBUQUERQUE, NEW MEXICO 87119-9100 (505) 243-2233 • TWX No. 910-989-1684 • FAX No. (505) 243-1021

BIOPHYSICS OPERATION 505-846-4252 or -4253 November 30, 1992

# COMMITTEE CORRESPONDENCE S12

Dr. Avril Brenig Standards Secretariat Acoustical Society of America 335 East 45th Street NY, NY 10017-3483

Dear Dr. Brenig:

Please ballot the S-12 Committee with respect to establishing a new working group with the title "Evaluation of Communication Ability in Noise for Individuals' Wearing Hearing Protection." The support for such a working group is given in Edwin Toothman's letter of 5 November.

The proposed scope should be that recommended in Kevin Michael's letter. If this working group is approved, I intend to ask Kevin Michael to serve as Chair.

Sincerely,

Daniel L. Johnson

Chair, S-12

cc:

Ed Toothman Kevin Michael

Paul Schomer

# Bethlehem Steel Corporation

BETHLEHEM, PA 18016



November 5, 1992

Dr. Dan L. Johnson Chairman, S12 Standards Committee EG&G Special Projects Albuquerque Operations Albuquerque, NM 87119-9024

Dear Dan:

As a followup to our conversation at the S12 meeting in New Orleans, this is a request for the S12 Standards Committee to consider the development of a proposed standard setting forth pertinent information regarding the ability of wearers of hearing protectors to hear and understand fellow workers as well as noise information emanating from machinery and warning equipment in and around the work area. Consideration needs to be given to hearing protector wearers with mild, moderate and severe hearing loss as well as those with normal hearing. Consideration also needs to be given to several different noise spectra shapes as the noise spectrum as well as the hearing level of the hearing protector wearer will influence the ability to hear and understand. The third variable is the attenuation provided by the hearing protectors.

This type of information has been developed for the steel and fastener industries. I would be available to assist in this activity by serving on the writing group.

Please let me know the S12 Committee's feeling on this suggestion.

Sincerely,

Edwin H. Toothman

Director, Occupational Health Health and Safety Services

EHT: kjk

# MICHAEL & ASSOCIATES, INC.

246 WOODLAND DRIVE STATE COLLEGE, PA. 16803 814-234-7042

November 17, 1992

Dr. Dan Johnson Chairman, S12 Standards Committee EG&G Special Projects Albuquerque Operations Albuquerque, NM 87119-9024

Dear Dan,

Thank you for offering the chair position of the S12 working group on communication while wearing hearing protection. Following is the title and scope for the proposed working group.

Title: Evaluation of Communication Ability in Noise for Individuals Wearing Hearing Protection

Scope: The development of a method of predicting the ability of an individual to communicate in noise while wearing hearing protection. The method will be applicable to individuals with normal hearing and to individuals with mild, moderate and severe hearing losses. The purpose is to allow the selection of hearing protection that prevents noise-induced hearing loss but that does not unnecessarily inhibit communication. The use of proper hearing protection optimizes verbal communication, warning signal recognition and recognition of machine operating sounds.

Please let me know if you have any suggestions or if I can be of further assistance at this time.

Sincerely,

Kevin Michael

# MICHABL & ASSOCIATES, INC.

246 WOODLAND DRIVE STATE COLLEGE, PA. 16803 814-234-7042 (PHONE/FAX)

June 8, 1993

Committee Correspondence
ANSI Working Group \$12/WG35
Fix duation of Communication Ability in Noise While Wearing Hearing Protection

From: Kevin Michael, Michael & Associates

To: Avril Brenig, ASA

Paul Michael PLM & Associates, Penn State Univ.

Charles Nixon WPAFB
Richard McKinely WPAFB
Denise West WPAFB
Curtis Smith IHCS

Tony Bovi ISEA, North Health Care

Leonard Marranceini MSHA

Alton Burks U.S. Bureau of Mines

Georges Garinther U.S. Army, HEL Aberdeen Proving Ground

Ed Toothman FINCRP

Dennis Williams U.S. Army, Penn State Univ.

We had our first working group meeting in Ottawa, May 18, 1993. Attending were Paul Michael, John Seiler, Charley Nixon and Ed Toothman. The meeting covered mostly administrative and general issues. The scope of the first drafts of the new standard will be limited to passive hearing protectors. If appropriate, the scope can be expanded to cover headsets, active (noise-canceling) protectors and level-dependent protectors. Kevin Michael will be distributing a first draft in the near future. Our next meeting will be in Denver at the October ASA meeting.

Sincerely,

Kevin Michael

Kelphel

OFFICE OF THE STANDARDS SECRETARIAT

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ATTACHMENT R-1 S12/278 13 November 1992

TO:

D.L. Johnson, Chair S12

RE:

Letter Ballot LB/S12/244 sent to Accredited

Standards Committee \$12 on 28 September 1992 and

closed on 9 November 1992

SUBJECT:

Approval of new organizational member of Accredited Standards

Committee \$12, the Council for Accreditation in Occupational Hearing

Conservation (CAOHC)

Enclosed please find tally of the above letter ballot, showing results as follows:

# **CLASSIFICATION OF MEMBERS**

AFFIRMATIVE VOTES	23	P - PRODUCER	8
NEGATIVE VOTES	1	C - CONSUMER	8
ABSTENTION	0	G - GOVERNMENT	7
NOT RETURNED	6	GI - GENERAL INTEREST	7
TOTAL	30	TOTAL	30

# Continuation of results of letter ballot S12/244:

## **AFFIRMATIVE VOTES:**

Anderson, R. Atack, R.M. Bohl, C.D. Bovi, A.M.

Burkard, R.F.

Chial, M.R. Erdreich, J.

Franks, J. Goodwin, R. Johnson, D.L.

Konheim, A. Luttrell, L.F.

McKinley, R.L. Michel, G.C. Naunton, R.F. Page, J.

Patterson, J.H. (Alternate) Rawlings, D.

Roth, S.I. Schomer, P.D.

Toothman, E.H.

Vendittis, D. Wang, S.

Larson-Davis Laboratories
U.S. Army Medical Corps.
American Industrial Hygiene
Industrial Safety Equipment
Association, Inc.

American Speech-Language-Hearing

Association dio Engineering Sociation

Audio Engineering Society, Inc. National Council of Acoustical Consultants

National Hearing Conservation Association Acoustical Systems, Inc.

Acoustical Society of America

U.S. Department of Transportation
Computer & Business Equipment
Manufacturers Association
U.S. Department of the Air Force
Bruel & Kjaer Instruments, Inc.
American Otological Society
U.S. Department of the Navy,
PLIPEALL OF MEDICINE AND SUPC

BUREAU OF MEDICINE AND SURGERY U.S. Army Aeromedical Research Lab.

National Electrical Manufacturers
Association (NEMA)

ALCOA

U.S. Dept. of the Army, Engineering Research Lab. (USA-CERL) Fastener Industry Noise Control Research Program

David Taylor Research Center Air-Conditioning and Refrigeration

Institute

# Continuation of results of letter ballot \$12/244:

**NEGATIVE VOTES:** 

Callahan R.

Power Tool Institute, Inc.

**ABSTENTIONS:** 

**NOT RETURNED:** 

Addington, J.H.

Brownson, P.J.

Fox, J.

Michael, L.A.

Pei, H.S.

Price, G.

Compressed Air and Gas Institute American College of Occupational

Medicine

**Edison Electric Institute** 

American Academy of Otolaryngology Head

and Neck Surgery

American Society of Heating and

Refrigeration and Air-Conditioning, Inc.

U.S. Army Human Engineering Lab.

**LATE RESPONSE:** 

NONE

Avril Brenig Standards Manager

cc: Standards Committee Vice Chair ASACOS Chair and Vice Chair



ATTACHMENT R-4

OFFICE OF THE STANDARDS SECRETARIAT

AVRIL BRENIG, Dn. P. H. STANDARDS MANAGER

18 10

335 EAST 45TH STREET, NEW YORK, NEW YORK 10017-3483

Telephone (212) 661-9404 Telex 960983 AMINSTPHYS NYK Telefax (212) 949-0473

#### **IMMEDIATE RETURN REQUESTED**

LB/S12/244 28 September 1992

Return to:

Letter Ballot Department

Due date:

9 November 1992

# ADMINISTRATIVE LETTER BALLOT ACCREDITED STANDARDS COMMITTEE ON NOISE, S12

Topic: Approval of new organizational member of Accredited Standards Committee S12, the

Council for Accreditation in Occupational Hearing Conservation (CAOHC)

Approved for circulation by:

D.L. Johnson, Chair \$12

Distributed by:

A. Brenig, ÁSA Stándards Manager

Reference Document(s):

ATTACHMENT A

Letter from R. Glaser, Chair, the Council for Accreditation in Occupational Hearing Conservation (CAOHC), dated 11 August 1992 to A. Brenig, ASA Standards Secretariat

# Background Information:

According to ANSI procedures, applications of all organizational members are submitted to the individual Standards Committee(s) for approval.

We are therefore enclosing the application received from R. Glaser, Chair of the Council for Accreditation in Occupational Hearing Conservation (CAOHC) for organizational membership in Accredited Standards Committee S12.

The Chair of S12 recommends approval of the application of CAOHC for organizational membership on the S12 Committee.

OFFICE OF THE STANDARDS SECRETARIAT

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 Telex
 960983 AMINSTPHYS NYK

ATTACHMENT S-1 S12/278 15 April 1993

TO:

D.L. Johnson, Chair S12

RE:

Letter Ballot LB/S12/259 sent to Accredited

Standards Committee S12 on 29 January 1993 and

closed on 12 March 1993

**SUBJECT:** 

Approval of proposal for new work item on Methodology for a Hearing

**Conservation Program** 

Enclosed please find tally of the above letter ballot, showing results as follows:

# **CLASSIFICATION OF MEMBERS**

AFFIRMATIVE VOTES	19	P - PRODUCER	9
NEGATIVE VOTES	1	C - CONSUMER	7
ABSTENTIONS	1	G - GOVERNMENT	7
NOT RETURNED	9	GI - GENERAL INTEREST	7
TOTAL	30	TOTAL	30

# Continuation of results of letter ballot S12/259:

## **AFFIRMATIVE VOTES:**

Anderson, R. Atack, R.M. Bohl, C.D.

Burkard, R.F. **Association** Callahan R. Goodwin, R. Johnson, D.L.

Konheim, A.U.S. McKinley, R.L. Michel, G.C.

Monk, W.

Naunton, R.F. Pei, H.S.

Rawlings, D. Roth, S.I.

Schomer, P.D.

Toothman, E.H.

Vendittis, D. Wang, S.

**Larson-Davis Laboratories** U.S. Army Medical Corps. American Industrial Hygiene

American Speech-Language-Hearing

Power Tool Institute, Inc. Acoustical Systems, Inc. **Acoustical Society of America** Department of Transportation U.S. Department of the Air Force Bruel & Kjaer Instruments, Inc.

**CAOHC** 

**American Otological Society** American Society of Heating and Refrigeration and Air-Conditioning

National Electrical Manufacturers Assoc. ALCOA

U.S. Dept. of the Army, Engineering

Research Lab.

**Fastener Industry Noise Control** 

Research Program

**Naval Surface Warfare Center** Air-Conditioning and Refrigeration

Institute

### **NEGATIVE VOTES:**

Franks, J.

**National Hearing Conservation Association** 

### **ABSTENTIONS:**

Bovi, A.M.

**Industrial Safety Equipment** Association, Inc.

# Continuation of results of letter ballot S12/259:

### **NOT RETURNED:**

Addington, J.H. Brownson, P.J.

Compressed Air and Gas Institute American College of Occupational

Medicine

Chial, M.R. Erdreich, J.

Audio Engineering Society, Inc. National Council of Acoustical

Consultants

Lotz, R.

Computer & Business Equipment

Manufacturers Association

Michael, L.A.

American Academy of Otolaryngology

Head and Neck Surgery

Mozo, B. Page, J. U.S. Army Aeromedical Research Lab.

U.S. Department of the Navy,

.5. Department of the Navy,

BUREAU OF MEDICINE AND SURGERY

Price, G.R.

U.S. Army Human Engineering Lab.

## LATE RESPONSE:

Franks, J.

**National Hearing Conservation Association** 

Konheim, A.

U.S. Department of Transportation

Vendittis, D.

Naval Surface Warfare Center

Avril Brenig Standards Manager

cc:

Standards Committee Vice Chair ASACOS Chair and Vice Chair



S12/278

OFFICE OF THE STANDARDS SECRETARIAT

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### IMMEDIATE RETURN REQUESTED

LB/S12/259 29 January 1993

Return to:

Letter Ballot Department

Due date:

12 March 1993

# ADMINISTRATIVE LETTER BALLOT **ACCREDITED STANDARDS COMMITTEE** ON NOISE, S12

Topic: Approval of proposal for new work item on Methodology for a Hearing Conservation **Program** 

Approved for circulation by:

Accredited Standards Committee S12 meeting held on 3 November 1992 (S12/248)

A. Brenig, ASA Standards Manager

#### Reference Document(s):

Letter from D.L. Johnson dated 30 November 1992 ATTACHMENT A

Proposed title and scope of New Work Item with letter ATTACHMENT B

from R. Goodwin dated 12 November 1992

# **Background Information:**

At the meeting of S12 held on 3 November 1992, New Orleans, La, (S12/248) Mr. R. Goodwin presented a proposal for a new work item on Methodology for a Hearing Conservation Program. The scope of the proposed new work item is given in ATTACHMENT В.

The Chair of S12, D.L. Johnson, and the chair of the proposed new working group, Mr. R. Goodwin, both recommend the approval of the new work item S12. If approved, the work item will be assigned to new working group S12/WG34.



2450 ALAMO AVENUE, S.E., P.O. BOX 9100, ALBUQUERQUE, NEW MEXICO 87119-9100 (505) 243-2233 • TWX No. 910-989-1684 • FAX No. (505) 243-1021

BIOPHYSICS OPERATION 505-846-4252 or -4253 November 30, 1992

# COMMITTEE CORRESPONDENCE Working Group S-12

Dr. Avril Brenig Standards Secretariat Acoustical Society of America 335 East 45th Street NY, NY 10017-3483

Dear Dr. Brenig:

Please ballot for the S-12 Committee with respect to establishing a new working group titled "Methodology for a Hearing Conservation Program." The proposed scope would be that in Goodwin's attached letter.

I understand that the overall aim of this working group will be to provide guidance for a hearing conservation program, incorporating the draft standard on "Measurement of Occupational Noise," the existing standard on "Evaluating Hearing Conservation Programs," and many other considerations. While I believe this working group will have a difficult task, I recommend we establish this working group to see what good items will result.

If approved, I intend to establish Richard Goodwin as Chairman of the Working Group.

Sincerely,

Daniel L. Johnson

Chair, S-12

cc: Paul Schomer

Richard Goodwin



# acoustical systems

P.O. Box 146 • 332 James E. Bohanan Memorial Drive • Vandalia, OH 45377

Phone: 513-898-3198 • FAX: 513-898-5043

November 12, 1992

Mr. D. J. Johnson EG & G Special Projects Albuquerque Operations Albuquerque, NM 87119-9024

Subject: Proposed new Standard

Dear Dan,

Per your request at the ASA S12 meeting in New Orleans, I am recommending that a new standard be developed to address hearing conservation programs. I would like to suggest the following title and scope for a working group.

# TITLE AND SCOPE

METHODOLOGY FOR A HEARING CONSERVATION PROGRAM - Develop a methodology for a hearing conservation program. The methodology must recognize pertinent engineering, medical, audiological, legal, and economic facts. The program must be practical, realistic, reproducible, and relevant to the prevention of occupational hearing loss.

Since I have never set up a working group, I would like additional information on this task before I would commit to be the Chair. I appreciate your interest in this matter and await your response.

Sincerely,

Richard Goodwin